PENCIL POINTS

DECEMBER

1936

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D E S I G N

VOLUME XVII NUMBER 12

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PENCIL POINTS

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6. Easy to Install
7. Modern
8. And They Cost No More Than Less Satisfactory Types of Floors
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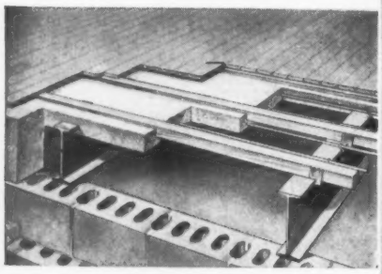
Photograph taken during the installation of a J & L Junior Beam floor in a modern residence. Note simplicity of concrete form construction.



Section view of Junior Beam floor construction

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HERE, THERE, THIS & THAT

N.Y.U. Awarded Medal by French Society

The New York University School of Architecture and Allied Arts was awarded the University Medal of the *Groupe Américain de la Société des Architectes Diplomés par le Gouvernement Francais*, highest honor of its kind, for the third time in five years at the annual reception of the School on November 18.

The University Medal is awarded annually to the architectural department of the College or University having the best record of accomplishment in the teaching of architecture along the lines followed by *l'Ecole Nationale et Speciale des Beaux Arts* in Paris. The medals are supplied by the parent society in France and hence are of semi-official character. The prize was also awarded to New York University in 1931 and in 1934.

Dean E. Raymond Bossange announced the names of students of the school who had won architectural prizes during the past year and whose success had won for New York University the coveted award. These included:

Beaux Arts Institute of Design—Paris Prize medals: Frank Montana (first) and Raoul DuBrul (second). *Medals for Excellence in Design:* Miss Taina Waisman, Joseph Caponnetto, Erling Iversen, Walter Ouspensky, Arnold Arbeit, Vito Girone, Donald Dunklee, Mario Cantioli, Louis Bellini, Sidney Katz, and Kassel Slobodien. *American Institute of Architects—Medal:* Herman C. Litwack. *Books:* James V. Balsamel and Frank Bellini.

Sachs Interior Decoration Contest: Donald Dunklee (second).

Joseph R. Gangemi award for the best water color done in regular class work: Anna Patricia Fried.

William T. Armstrong prize for the best water color done outside of regular class work: Sidney Katz.

Solomon M. Delevie award in analytique: William S. Falkenstein.

The Month in Boston

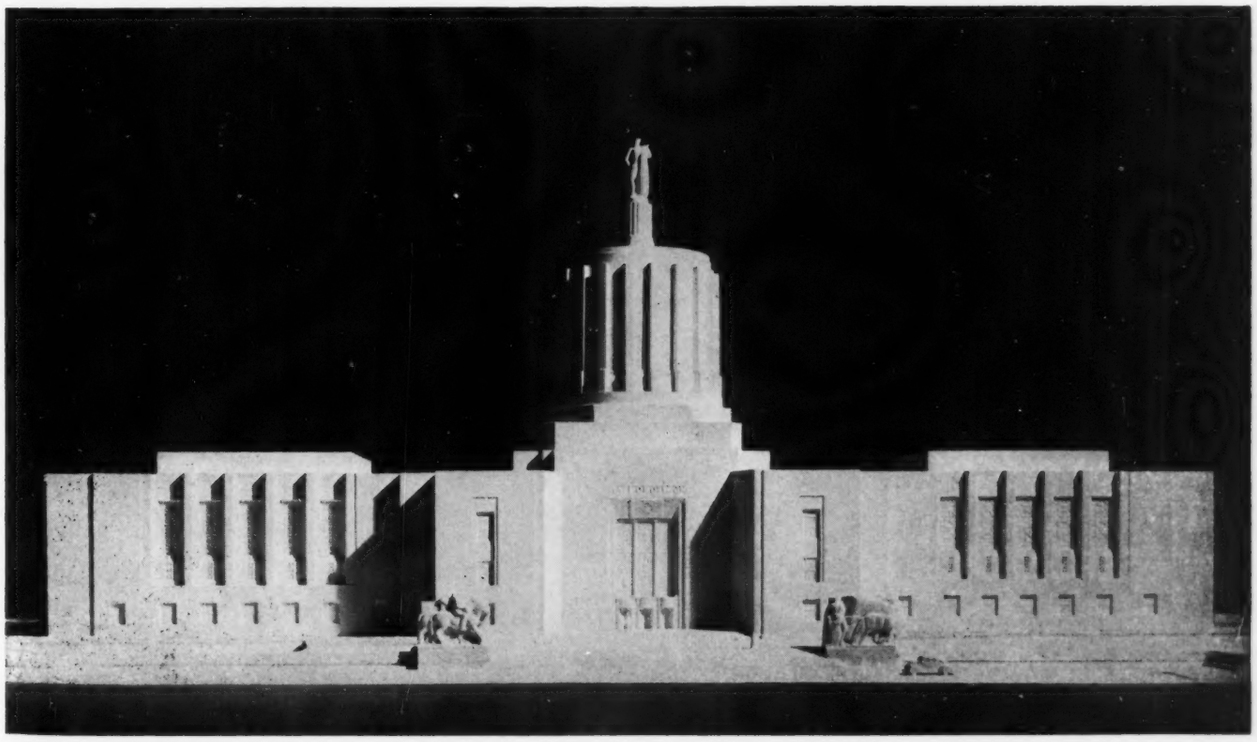
The architectural world of Boston is going into the winter season under wraps. Sporadic activity obtains among the offices, but there are few cases of draftsman's elbow traceable to excessive charretting. In more than one drafting room the Sabbath stillness has been piously preserved by a skeleton crew, kept on to handle such as the new left wing of the Nineteenth Hole Country Club, on which the start of active work attended the election of the right man in our recent political fracas. Building committees are now trying to figure right from left, and verdicts are impending.

Relief projects carry fewer and fewer architectural men, but governmental building has solved the struggle for existence in many cases. So local opportunities are largely adequate in number, though spread a bit thin, and fewer men go the rounds than one might expect. Then, too, the times have developed a resourcefulness in the draftsmen, and there are those now in minor competition with their erstwhile employers, among the small houses and stores. They have taken over the field where butcher's paper plans and elevations once sufficed, and are going on to greater things. There are others who catch you off your guard, when you meet them, with a sales talk on insurance, or building materials, or rattlesnake oil.

But if the profession is still trying to equilibrate itself, in this, the Year of the Landslide, in the Calendar of the New Deal, there are inner bulwarks to shelter and encourage the amenities, fragile ethics, or the dissemination of ideas; esoteric lines of defense that seem much the same.

Locke-Ober's has rounded the elusive Corner, with all its gustatory perfections, concerning which Hubert Ripley is the local arbiter. Most of us are still carrying trays, but it is comforting to walk through Winter Place and look in at Charlie or Marco, in his robes of office and at his good work; to get a wave of the hand for old time's sake, and promise yourself renewed acquaintance when money is easier and the last payment has been made on the baby.

Catering to an area about twenty-three inches higher, in the average architectural man, and sharing Beacon Hill with the politicians, our three



FRONT OF MODEL OF OREGON STATE CAPITOL BY TROWBRIDGE & LIVINGSTON AND FRANCIS KEALLY, ARCHITECTS

professional organizations show a healthy activity. The Boston Society of Architects and the Boston Architectural Club need no introduction, and there is the newer Architectural League of Boston.

This last-named group, headed by Ed Johnson, is relatively newborn, but like the feller in the story, it sprang fullgrown into being, clad in whiskers and a straw hat; the sublimation of an earlier group. Its membership may include any and all draftsmen who earn a living in the profession, and whose interest in architecture does not suffer a daily relapse at five in the afternoon. These men have never before had a focal point in Boston, exclusively their own, and its desirability has been generally appreciated by architects of the B. S. A. The League's primary object is to stimulate and broaden the common professional interests of its members, and to that end there are, among other things, monthly speakers and discussions. Mr. Ralph Adams Cram opened the season in spirited fashion, with a talk on "The Future of Architectural Style"; others will follow, and there are beer nights ahead. These meetings take place at the Boston Architectural Club.

As we survey the current scene there are nostalgic twinges over the passing of good old architectural names, and customs, and beliefs. New figures appear, with reputations and traditions to build along with their architecture. The thirty-five hour week has pretty generally arrived, and the so-called "living wage" has, with a few distinguished exceptions, been lost in the shuffle. But the architectural man, in Boston, faces the coming winter with rising hope, as he digs out his red flannels and checks up on his skis.

LEON KEACH

And Can Nothing Be Done About It!

Harry Lucht, the alert secretary of the Architects' League of Northern New Jersey, draws attention to a statement in Nina Wilcox Putnam's featured story in the Satevepost for November 14, which, if believed by the Post's two and a half million readers, would not be so good for architects, or draftsmen either. Describing the procedure followed by herself and husband in building their own house in Florida, Mrs. Putnam said, "When we found that no architect would touch the house for less than 10% of its cost, we simply decided we would have to forego not the house but the architect. So we found a young architectural draftsman who, for ten dollars, drew our plans to scale." The house cost about four thousand dollars in cash plus many hours of labor by Mr. and Mrs. Putnam.

A Correction

The peerless model maker referred to on page 617 of the November issue, in connection with the New York World's Fair, is really Edward T. Howes and not Ralph Howes, as stated. We regret the error in name but still stick to our opinion of his abilities.

Returned Rome Fellows Show Work

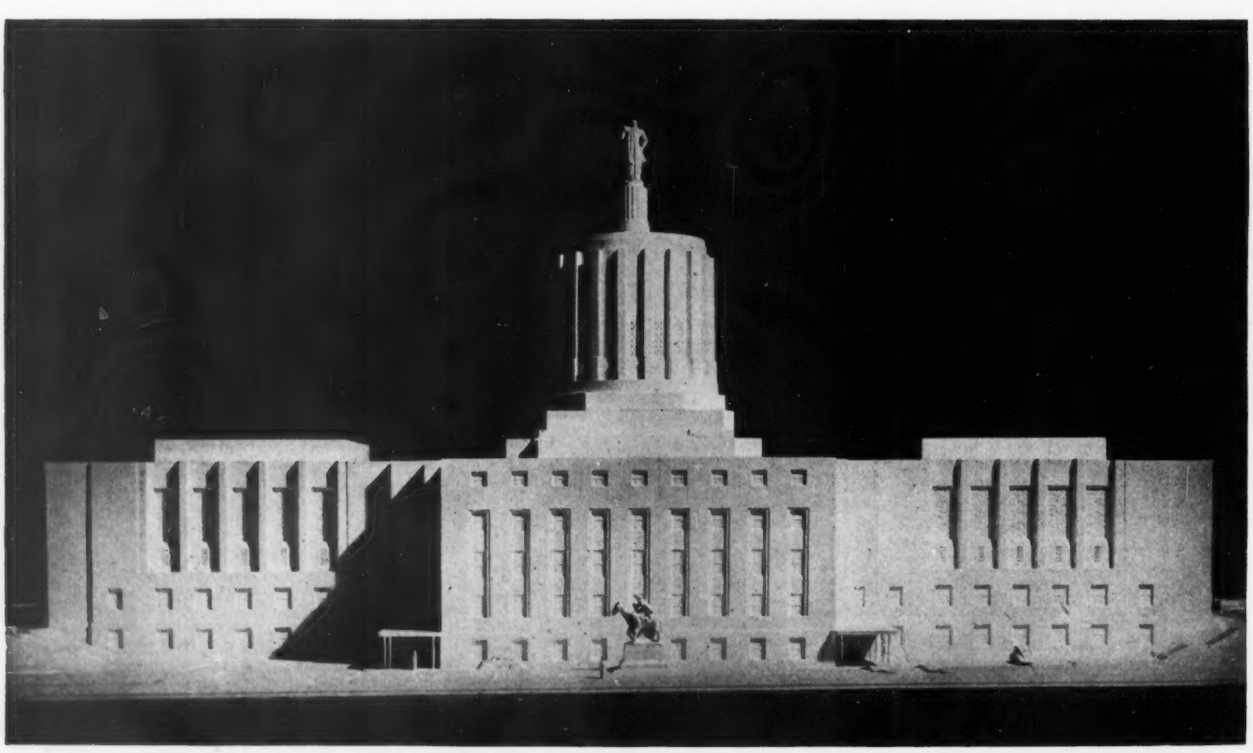
An exhibition was held from November 16 to 21 at the Grand Central Galleries in New York of the works of Gilbert Banever, *painter,* Olindo Grossi, *architect,* Alden Hopkins, *landscape architect,* Reuben Robert Kramer, *sculptor,* and Robert Arthur Weppner, *architect,* Fellows of 1936 at the American Academy in Rome.

Sky Parks

Charles C. Platt, of F. P. Platt & Bro., Architects, New York, was prompted by Eugene Raskin's "The Underground City" in September PENCIL POINTS to send in another suggestion for modifying city life by architectural effort. We quote Mr. Platt:

"Ordinarily in real estate and building enterprises sites for low-rent projects must be selected away from central locations, particularly where a minimum of building area and a maximum of court space is one of the principal objectives. The light and air element makes the land cost a serious obstacle, as it stands today.

"But the problem of light and ventilation is in the process of development. Factories and store buildings have been built on full plottages, depending solely upon artificial light and ventilation. Scientists tell us that the manu-



AROUND BACK OF THE NEW OREGON STATE CAPITOL MODEL BUILT BY ROCHETTE & PARDINI ACCORDING TO THE WINNING DESIGN BY TROWBRIDGE & LIVINGSTON AND FRANCIS KEALLY AND PHOTOGRAPHED BY SIGURD FISCHER

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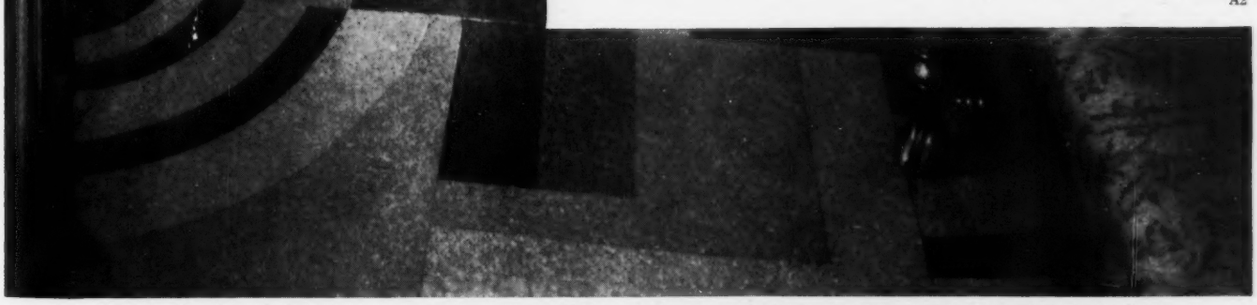
To provide a convenient source of dependable information on terrazzo, The National Terrazzo and Mosaic Association has established an office at 1406 G Street NW, Washington, D. C. Your request for technical information addressed to that office will receive a prompt response.

A2



THE NATIONAL TERRAZZO AND MOSAIC ASSOCIATION

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factured product is better than the natural one. Who knows but in the none too distant future the solution of the living problem will be along the lines of 100 per cent built-up plottage with imitation sunlight flooding the rooms through imitation interior windows, imitation breezes blowing through them in the summer and conditioned air in the winter, thus giving the dweller full measure of light and air combined with ample space accommodations and living conveniences, all at a price considerably under the present scale.

"It may look like a mechanistic solution, but that is what the age is tending toward and it should be recognized before many more millions are spent, possibly in the wrong locations and in the wrong type of buildings. This solution is not a gloomy one. Picture every block a solidly built building and the top of each a park and a playground with plenty of light and air, and free from the dangers, noise and dust of the traffic below. Shops could also be located up here on the perimeter of the buildings, where the housewife could do her marketing amid convenient and pleasant surroundings. With automatic elevators the height can be unlimited and the land value thus becomes a much smaller factor, making low-cost housing both economical and feasible in any reasonable location."

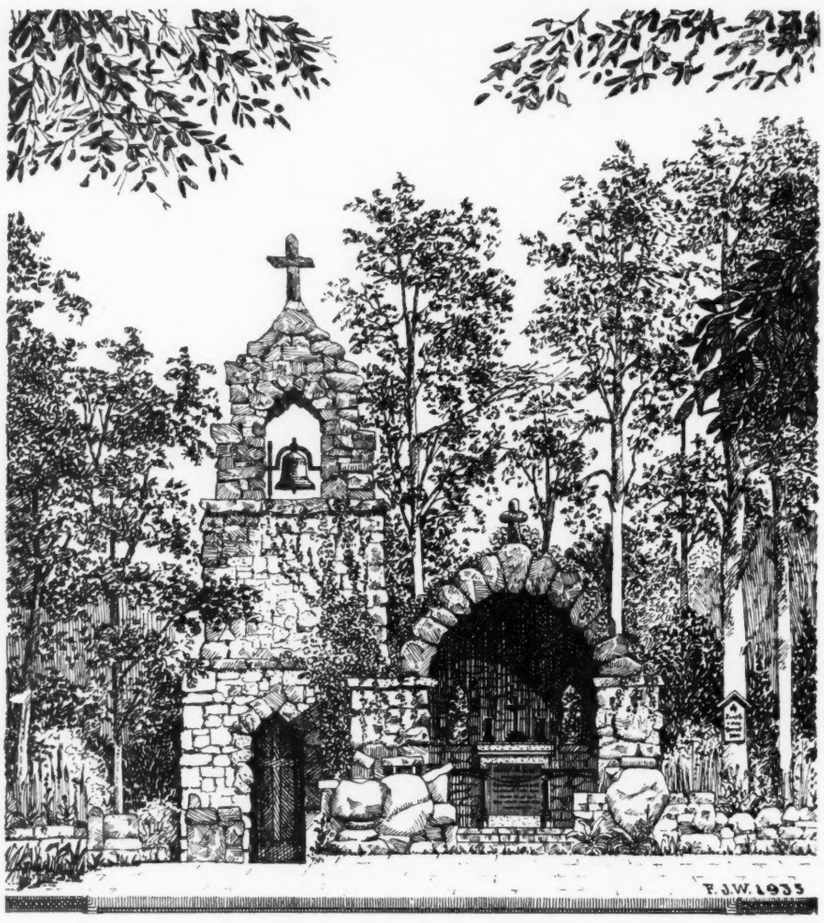
Mr. Platt's proposal is obviously more serious than that of Mr. Raskin and much more likely to become a reality as the housing problem is progressively attacked and solved.

A Virginia Mountain Shrine

Fred J. Woodward, Washington architect, who made the pen and ink drawing reproduced herewith, writes of its subject, the Cathedral Shrine of the Transfiguration at Shrine Mont in the Virginia mountains:—

"The beautiful old state of Virginia holds many lovely places, but it may be doubted if even the Old Dominion cherishes a place more beautiful both in presence and in spirit than the Shrine of the Transfiguration, which is the heart of Shrine Mont, a vacation and conference center of the Episcopal Church. Shrine Mont rises two thousand four hundred feet above sea level in the Alleghanies, touches the vast George Washington Forest Reserve, and overlooks the little village of Orkney Springs. A fine auto road connects with Mont Jackson, Virginia, thirteen miles east on the famous Valley Pike, National Highway Number Eleven.

"The story of the Shrine has a glamour and mystical quality all its own. It must here suffice to say that it was built in 1924-5 as a memorial to Bishop Gibson of Virginia who had his summer home nearby and who loved this spot, as have many other Church people during the century past.



"The Shrine consists of a stone-roofed sanctuary sheltering an altar and a sacristy bell-tower, which together might have been picked up from some quaint old chapel built in an early English forest and carried over the waters to Virginia. The tower is thirty-five feet high and is surmounted by a rude stone cross. The walls are massive and will endure through ages. Each stone was selected for its beauty of color and adaptation of shape and was brought from the place where it had lain for generations to take its place in this sanctuary.

"The altar, font, pulpit, lectern, prayer desks, and sedilia—all of unhewn stone—incite a sense of marvel at such harmony of nature and art as handmaidens of worship. The gothic arch over the sanctuary consists of thirteen stones, six on either side and a keystone above which rises a cross. The group as a whole symbolizes Christ and the twelve Apostles. Other symbolism—'comparing visible forms for showing forth the invisible'—gathers about the whole structure and makes it a veritable sermon in stone.

"The charm, beauty and significance of the Shrine and its precincts make a growing appeal to all kinds of people; and world travellers often say that it is worth journeying far to see this Virginia mountain shrine."

* * *

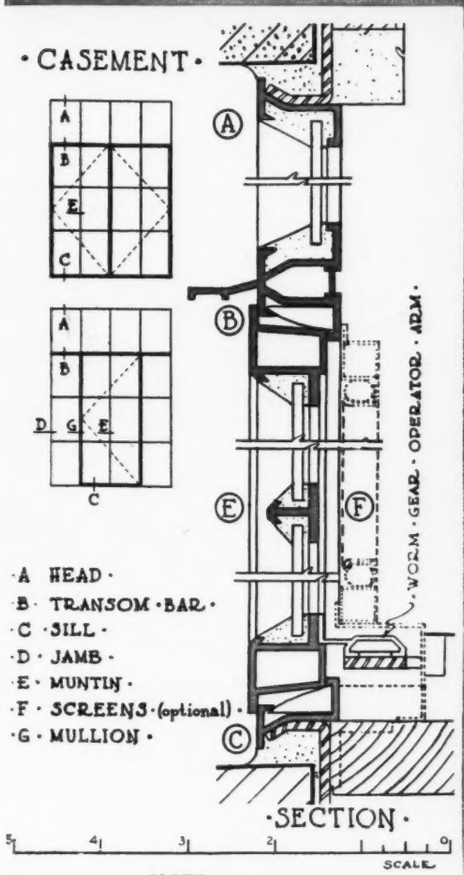
The Rev. Edmund L. Woodward, Director of Shrine Mont, has expressed in two verses, given below, something of the feeling aroused in the visitor by this rustic sanctuary.

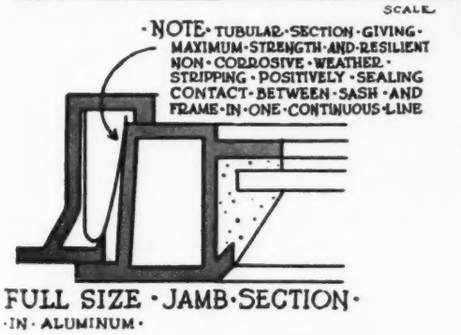
Here verdant loveliness
of lichened, mossy stone,
of clinging ivy,
wildwood fern and flower,
Here waterfall
from mountain spring to pool,
majestic trees,
blue heaven's vault,
Through beauty,
form and color—
Glorify the Shrine.

Here nature, art
and holy aspiration give
of past and present
their creative best;
the transient
shows eternal Worth;
And apprehending—
man lifts up
His soul to God.

E. L. W.

Eliminate Draughts!





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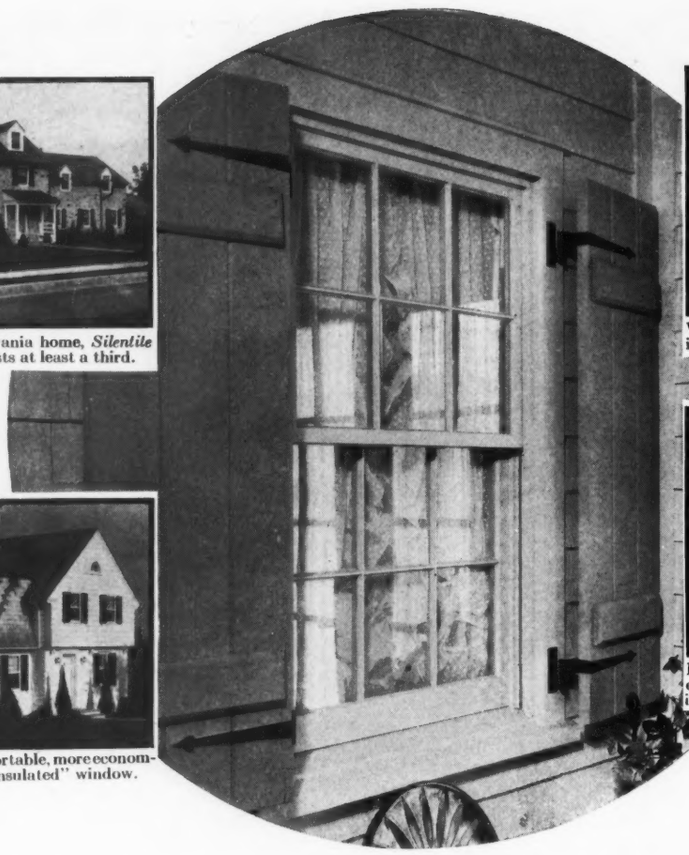

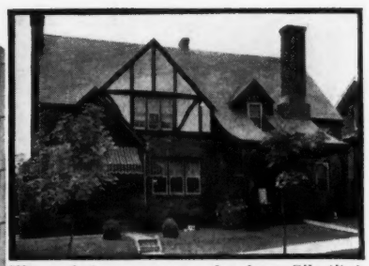

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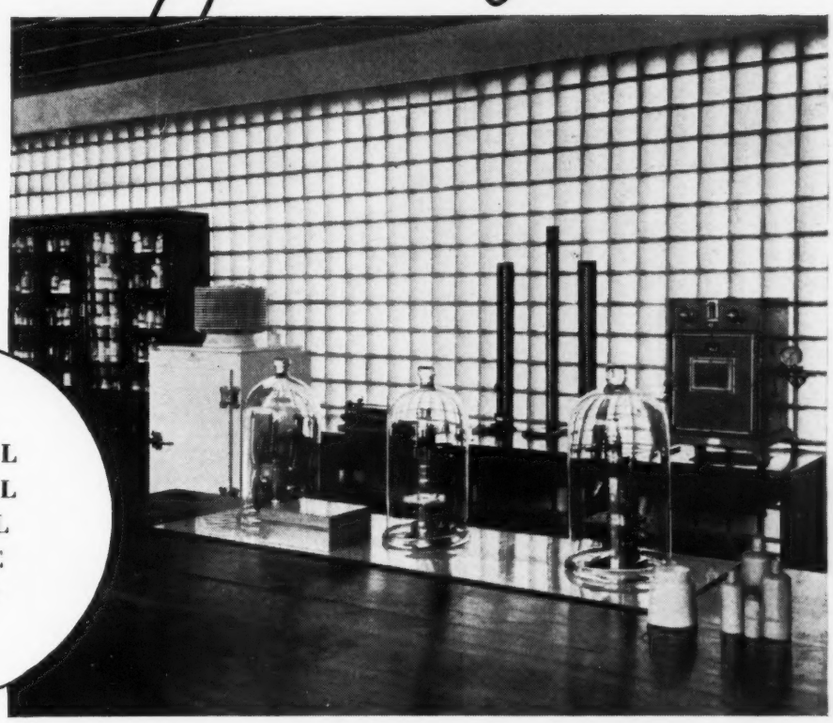

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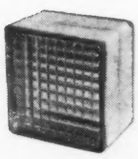
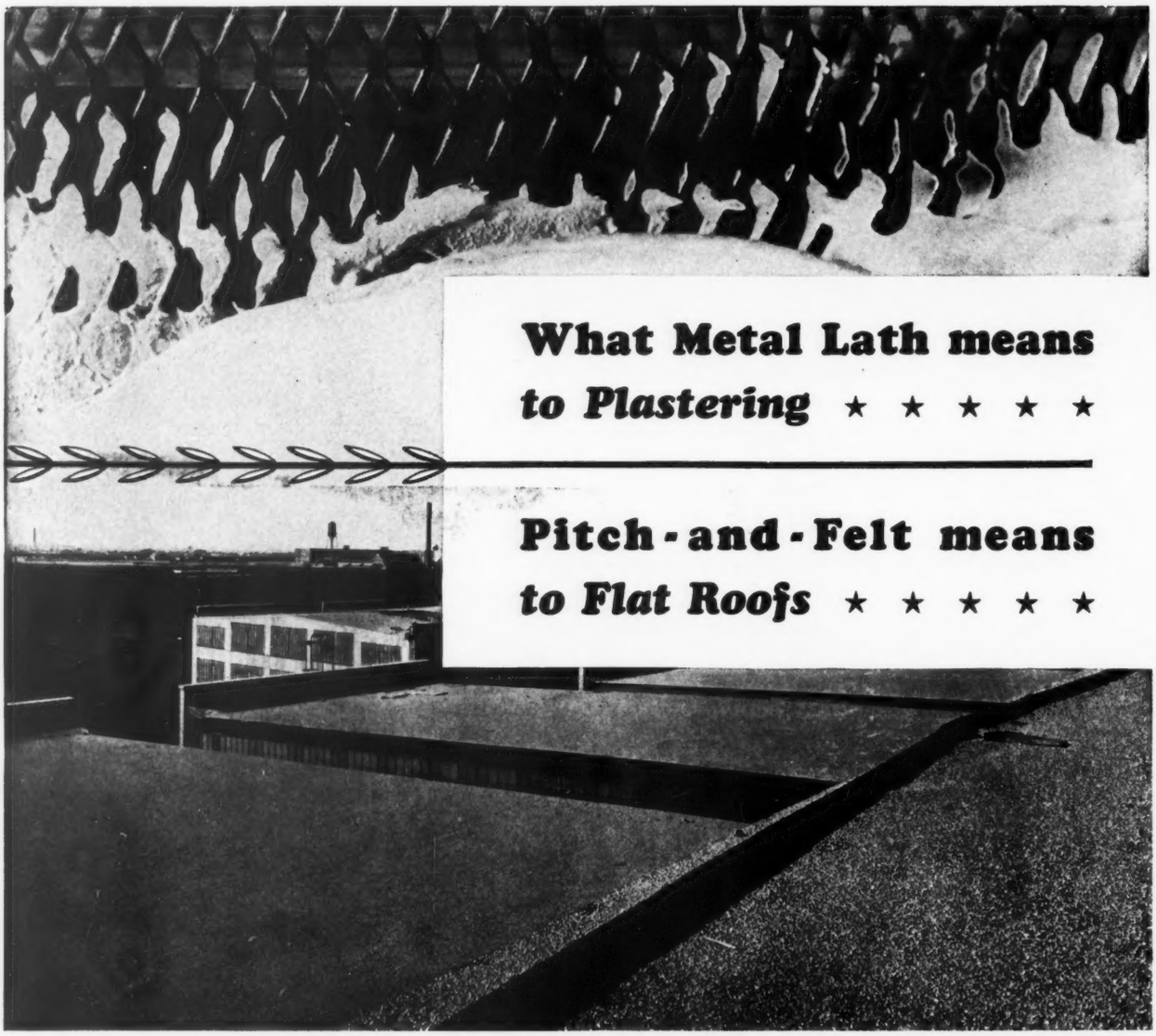
OWENS-ILLINOIS INSULUX *Glass Masonry*

RETARDS HEAT  **ADMITS LIGHT**



What Metal Lath means *to Plastering* ★ ★ ★ ★ ★

Pitch-and-Felt means *to Flat Roofs* ★ ★ ★ ★ ★

Metal lath means fewer cracks in plaster. Pitch-and-felt means fewer cracks in roofs. Coal tar pitch has a pliability and ductility which enables it to withstand, to an unusually high degree, vibrations and movements of roof decks which might cause cracks. But, if cracks do occur, the coal tar pitch has a property known as "cold flow" which makes the sides of the cracks move slowly together, even at ordinary temperatures, until complete fusion takes place and the layer of pitch becomes continuous again.

Metal lath means a firmly bonded wall. A pitch-and-felt roof (with slag or gravel top surface) means a firmly anchored roof.

★ ★ ★

Roofs of pitch-and-felt mean long life and freedom from trouble. 20 years of service is not unusual for a pitch-and-felt roof; many pitch-and-felt roofs have lasted 30, 40 and even 50 years.

For your client's protection, specify Koppers Coal Tar Pitch and Tar-Saturated Felt on all flat roofs.

Complete specifications for all Koppers roofs are in Sweet's.

KOPPERS COAL TAR PITCH

KOPPERS **KOPPERS TAR-SATURATED FELT**

KOPPERS TAR-SATURATED FABRIC

KOPPERS COMPANY,
TAR AND CHEMICAL DIVISION
KOPPERS BUILDING PITTSBURGH, PA.

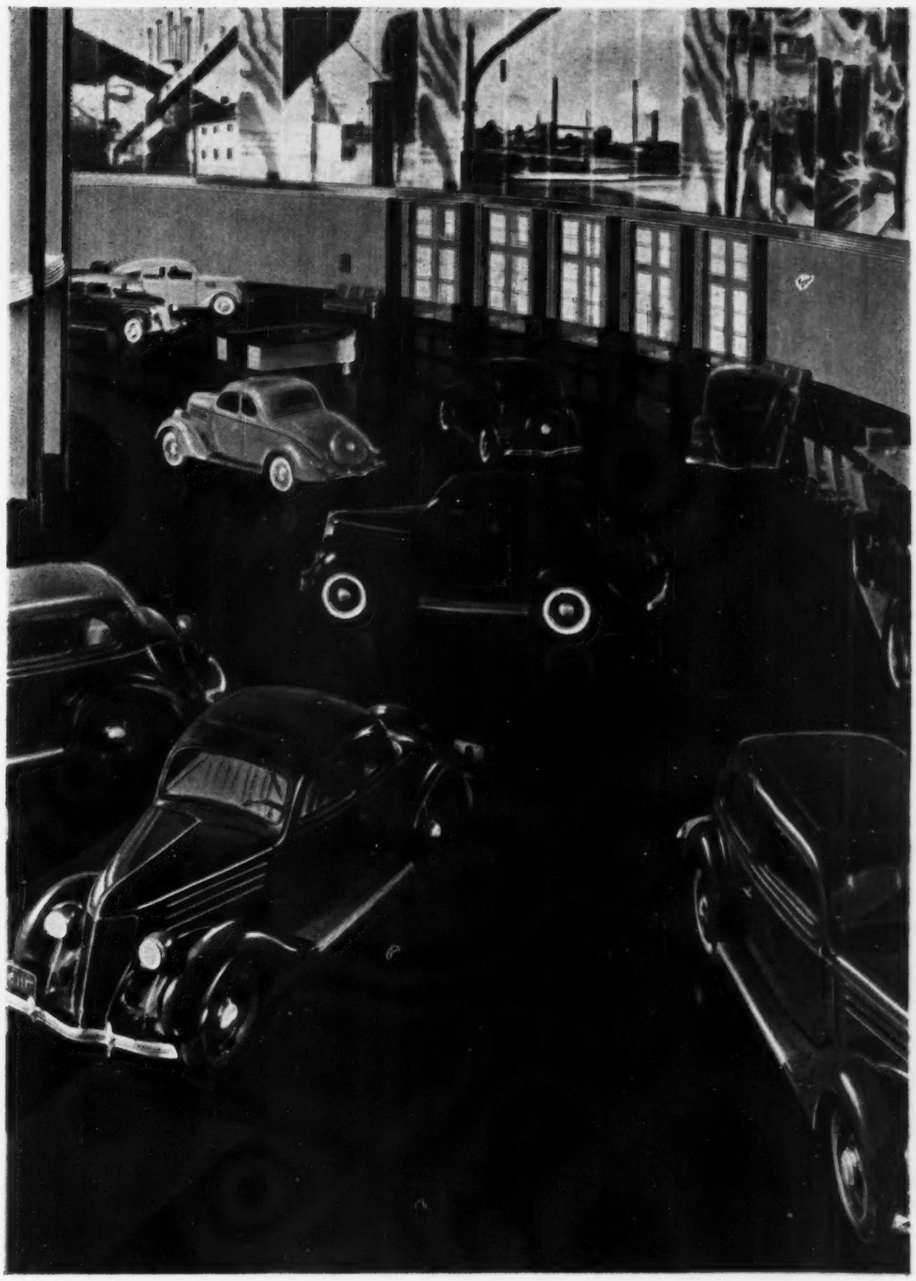
★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★ ★

KOPPERS COMPANY, TAR AND CHEMICAL DIVISION P-6
Pittsburgh, Pa.

Please send me:
Roofing Specification Book . . . ☐
Don Graf Data Sheets . . . . . ☐
Waterproofing Information . . . ☐

Your Name .....
Firm .....
Address .....

OTHER KOPPERS PRODUCTS: Koppers Creosote . . . Koppers Waterproofing and Dampproofing . . . Tar Base Paints . . . Tarmac for Roads, Streets, etc



FORD ROTUNDA WITH LINOTILE FLOORS, *Dearborn, Michigan. This durable Armstrong's Linotile Floor, in two special shades of blue, forms an attractive sales background for the Ford cars. Architect: Albert Kahn, Inc., Detroit.*

DISTINCTIVE LINOTILE FLOORS *can help you swing big jobs your way*

LINOTILE enables you to create floors that attract favorable attention and bring new commissions into your office. Its richly colored individual tiles offer a versatile medium for distinctive floor designs in plain or marble colorings.

In addition, Linotile has all the practical advantages your clients expect in a floor. It is cheerful, comfortable, and quiet. The rich colors run through to the back — can't be worn off by scuffling feet. In the marble patterns, the non-directional swirl graining hides traffic marks. Linotile is inexpensive to install, economical to maintain. It is even more resistant to denting than battleship linoleum. With daily sweeping and occasional washing and waxing. Linotile remains fresh and beautiful for years.

Armstrong manufactures the only complete line of resilient floors, including, besides Linotile, Rubber Tile, Accotile, Cork Tile, and Linoleum in a wide range of attractive patterns and colors. With this complete line, the Armstrong Architectural Service Bureau is in a position to give you unbiased suggestions on the best type of floor for any purpose. For complete details, see Sweet's, or write today for "Individuality in Handlaid Floors." Armstrong Cork Products Company, 1451 State St., Lancaster, Pennsylvania.

ARMSTRONG'S LINOLEUM
***and* RESILIENT TILE FLOORS**
LINOTILE ~ ACCOTILE ~ CORK TILE ~ RUBBER TILE ~ LINOWALL ~ ACOUSTICAL CEILINGS

Pressure of current economics has barred the use of expensive decorative materials and of costly elegance in theatre design. Instead, the architect has been forced to design beautiful buildings of moderate cost and of very low upkeep.

The solution? Balaban & Katz' Will Rogers Theatre provides one answer. For this firm and its architects made comprehensive comparative cost studies of various materials and decided that a better looking building could be produced in concrete. Yet costs were kept low.

Concrete is serving equally well in a wide range of buildings—homes and churches, offices and factories, schools and hospitals. To its beauty and architectural distinction it adds firesafety, strength, permanence—and the economy that results from combining structural and architectural functions in one material.

Let us help you plan your next building in concrete. There are many helpful facts about the latest technique in our free Information Sheets and in the new manual, *Forms for Architectural Concrete.*

PORTLAND CEMENT ASSOCIATION

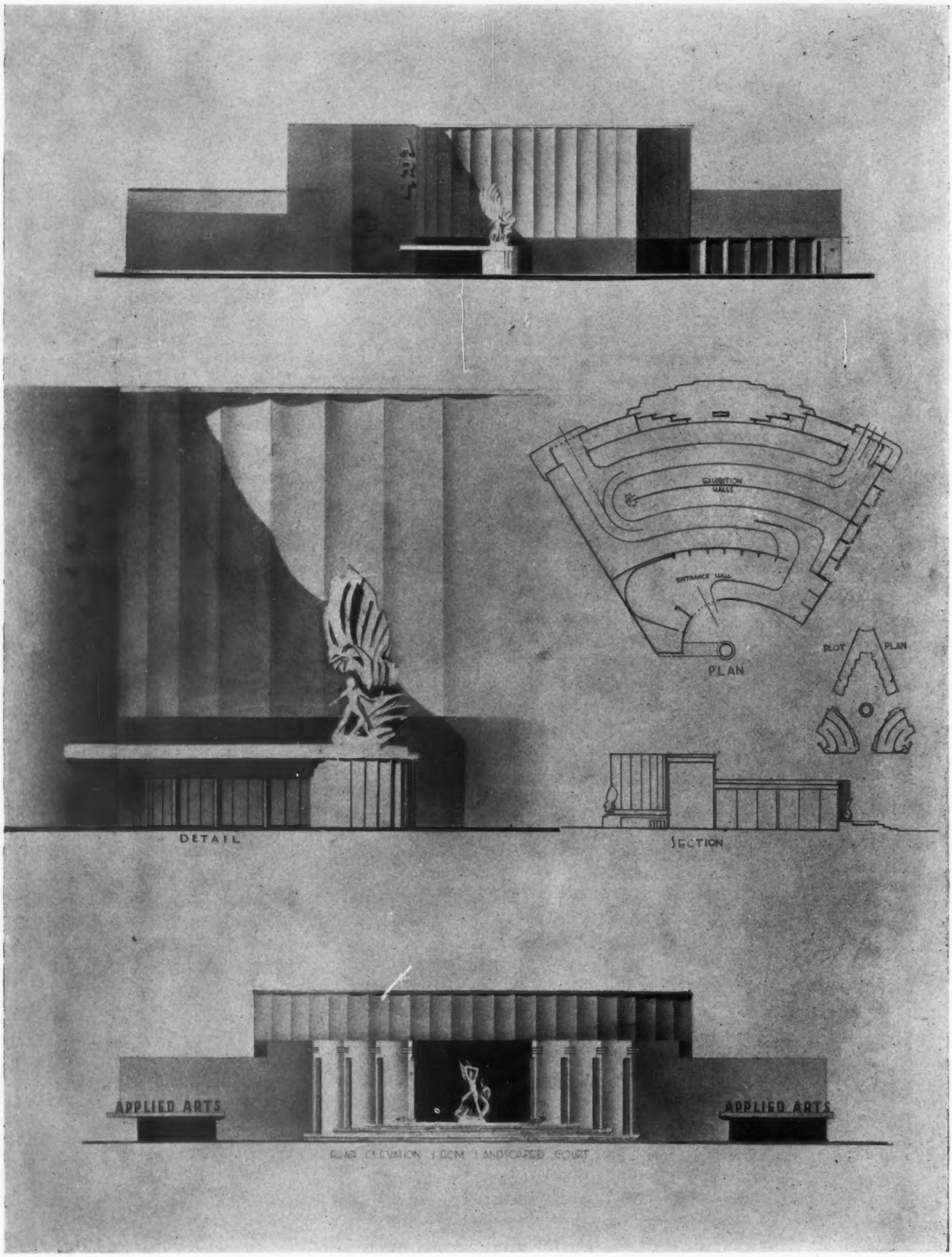
Dept. A12-25, 33 W. Grand Ave., Chicago, Ill.

Balaban & Katz' new Will Rogers Theatre, Chicago
C. W. and Geo. L. Rapp, Inc., Architects
Lieberman & Hein, structural engineers
Paschen Bros., Inc., contractor

GEORGE LYMAN PAINE, JR., WHOSE DESIGN FOR AN EXHIBITION BUILDING, SUBMITTED IN THE COMPETITION HELD BY THE NEW YORK WORLD'S FAIR, WAS ADJUDGED THE MOST MERITORIOUS. MR. PAINE IS 35 YEARS OLD AND A DESCENDANT OF ROBERT TREAT PAINE, SIGNER OF THE DECLARATION OF INDEPENDENCE. HE WAS GRADUATED FROM HARVARD IN 1922

PETER COPELAND, WHO WAS AWARDED THE SECOND PRIZE OF $750 IN THE COMPETITION FOR THE DESIGN OF AN EXHIBIT BUILDING FOR THE NEW YORK WORLD'S FAIR. HE IS A PRODUCT OF COLUMBIA AND NEW YORK UNIVERSITY AND HAS WON MANY PRIZES IN COMPETITIONS. AT 32 HE IS THE HEAD OF A FIRM SPECIALIZING IN THE DESIGN OF INDUSTRIAL DISPLAYS

PERRY COKE SMITH, WHO WON THE THIRD PRIZE OF $500 IN THE NEW YORK WORLD'S FAIR COMPETITION, GRADUATED FROM COLUMBIA IN 1923 AND WON THE McKIM FELLOWSHIP IN ARCHITECTURE. HE IS 37, MARRIED, AND HAS TWO DAUGHTERS. HE PRACTICES IN NEW YORK BUT LIVES IN NORWALK, CONNECTICUT



GEORGE LYMAN PAINE, JR., WAS NOT GIVEN FIRST PRIZE FOR THIS DESIGN BUT THE JURY CONSIDERED IT MOST MERITORIOUS. WHERE THE MAIN PLAN OF THE FAIR SAYS THE VISITOR IS NOT INTERESTED IN THE EXHIBITS, THIS PLAN SAYS HE *MUST* SEE THE EXHIBITS EVEN THOUGH HE DIE DOING IT. THE ELEVATION IS CLEVER AND TRICKY BUT MIGHT PROVE DISAPPOINTING AS A FINISHED BUILDING TO JUDGE BY THE PARIS 1925 EXPOSITION. PLOT PLAN IS BANAL AND SKETCHY

WORLD'S FAIR COMPETITION

BY KENNETH REID

On the facing and succeeding pages, the editors have reproduced the prize and mention designs selected by the Jury of Award in the competition held by the New York World's Fair 1939 Incorporated and judged late in October and early in November. In presenting them we have taken the liberty, for which we hope to be forgiven if any be offended, of printing with each a caption expressing an honest and helpfully intended criticism pointing out its merits or defects as seen by unbiased eyes. In the absence of any official Jury Report we felt that something should be provided beyond merely stating the names of the designers in each case in order that all and sundry might learn something from the competition. We wish to emphasize that the statements printed are opinions only and that the reader is free to disagree with them if he chooses. The important thing, as we see it, is that the designs should be carefully studied—perhaps the remarks may be an incentive.

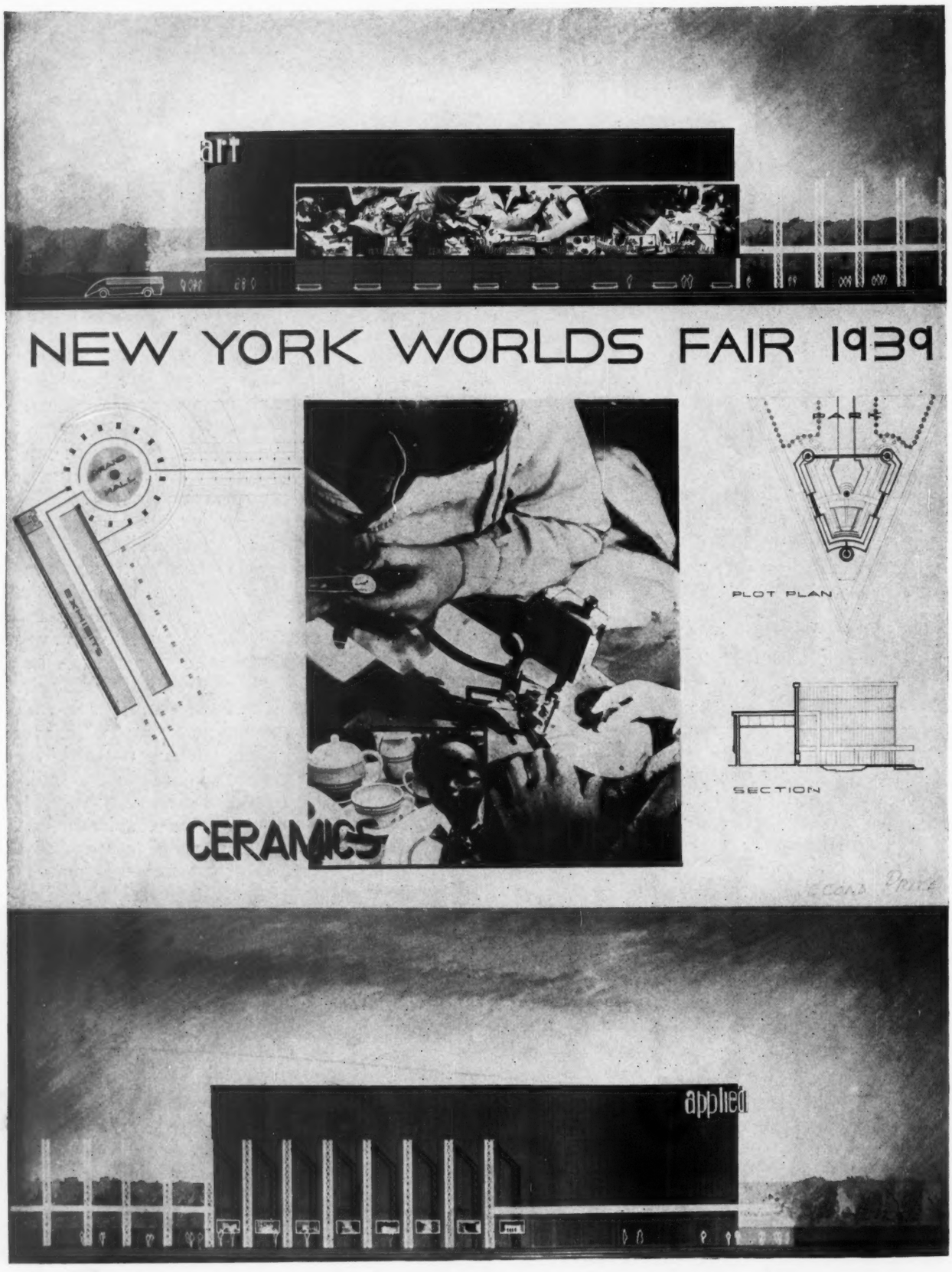
In studying them, the essentials of the program should be known. It called for the design of "a typical building" for the Fair, intended to house public exhibits in the field of applied arts. It was to occupy one corner of a triangular plot, a diagram of which was given. Other buildings similar in purpose were to occupy the other two corners. Maximum heights were given for the entrance hall (80 feet) and for the exhibit halls (35 feet), both of which were to be of one story only with floor at about the ground level. Widths of exhibit halls were to be 60 feet or 120 feet with 20′ x 20′ exhibit spaces on either side of 20-foot aisles. The major dimension of the building was limited to 350 feet. Construction was specified as steel frame sheathed with any fire-resisting sheet material. 60-foot spans were indicated as probable.

No windows or skylights were permissible in exhibit halls, though they might be used in other parts of the building. Within the limits given, the shape of the building was left to the competitor as was also the shape, treatment, and size of the landscaped court and park area. Exhibits were defined as "small articles in ordinary use, such as pottery, furnishings, and like articles." Outdoor exhibits were ruled permissible in the court area.

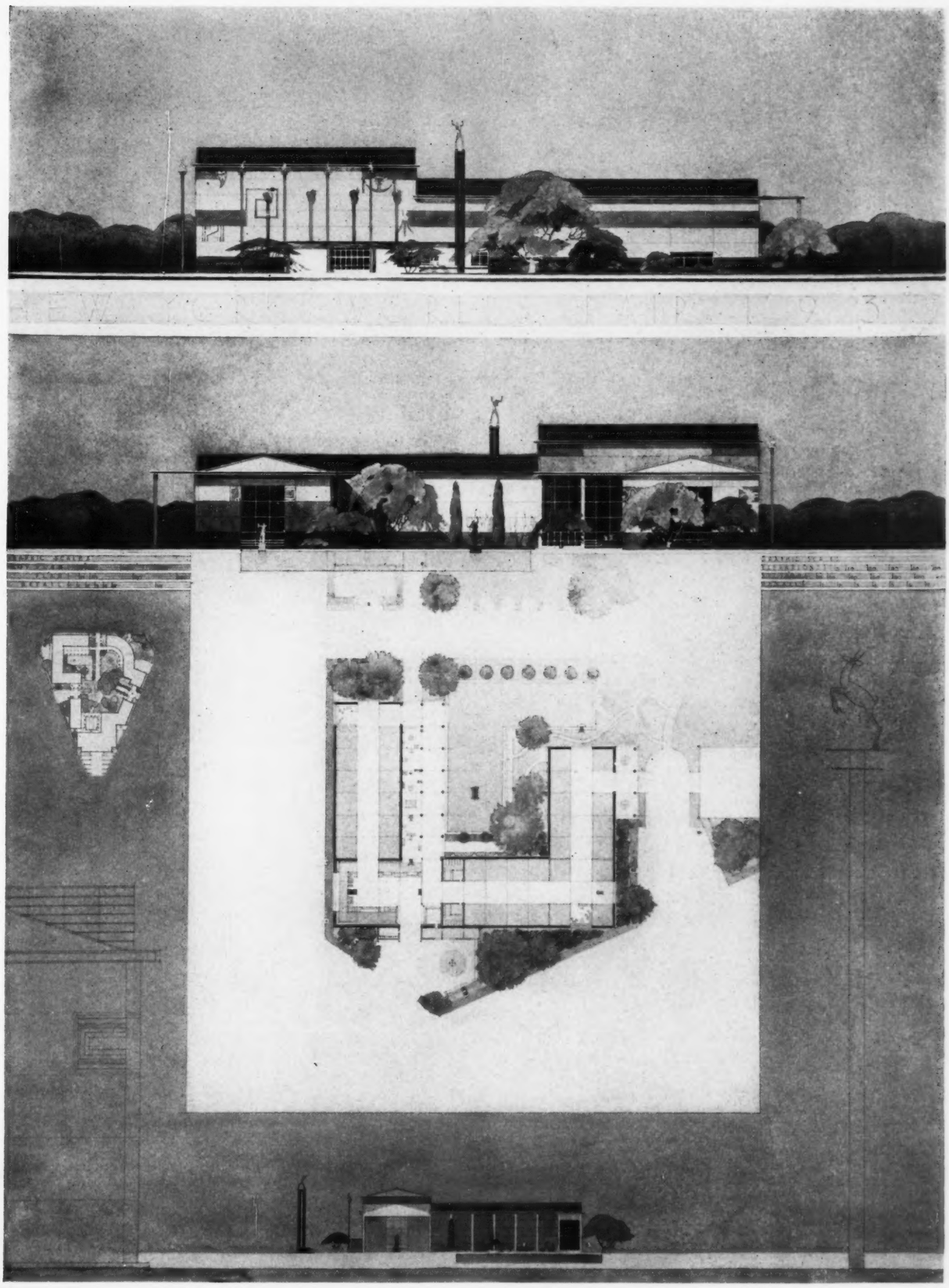
The competition was open to all architects registered in New York and living or having an office in the New York metropolitan area. Nothing was said in the program which could possibly be interpreted to exclude men working for the Fair corporation or the Board of Design and the Board ruled, early in the competition, upon being questioned, to the effect that there was nothing whatsoever improper in such participation by employees since there was no information or assistance available to them that was not equally available to all other competitors. After the Jury had selected Mr. Paine's design for first prize, however, it was discovered that his collaborator was an employee of the Fair. The Board of Directors of the Fair thereupon ruled that, owing to the possibility of misunderstanding of the situation by the general public, Mr. Paine should not receive first prize as such but that he should be given "an appropriate reward and credit for his design, which was recognized by the Fair Corporation as an admirable piece of work."

The object of holding the competition was not to get a design for a specific building but rather to unearth some new talent and some new ideas. All of those placed among the prizes and mentions have qualified for positions on the preferred list of architects eligible for appointment to do particular buildings, groups, facades, or approaches.

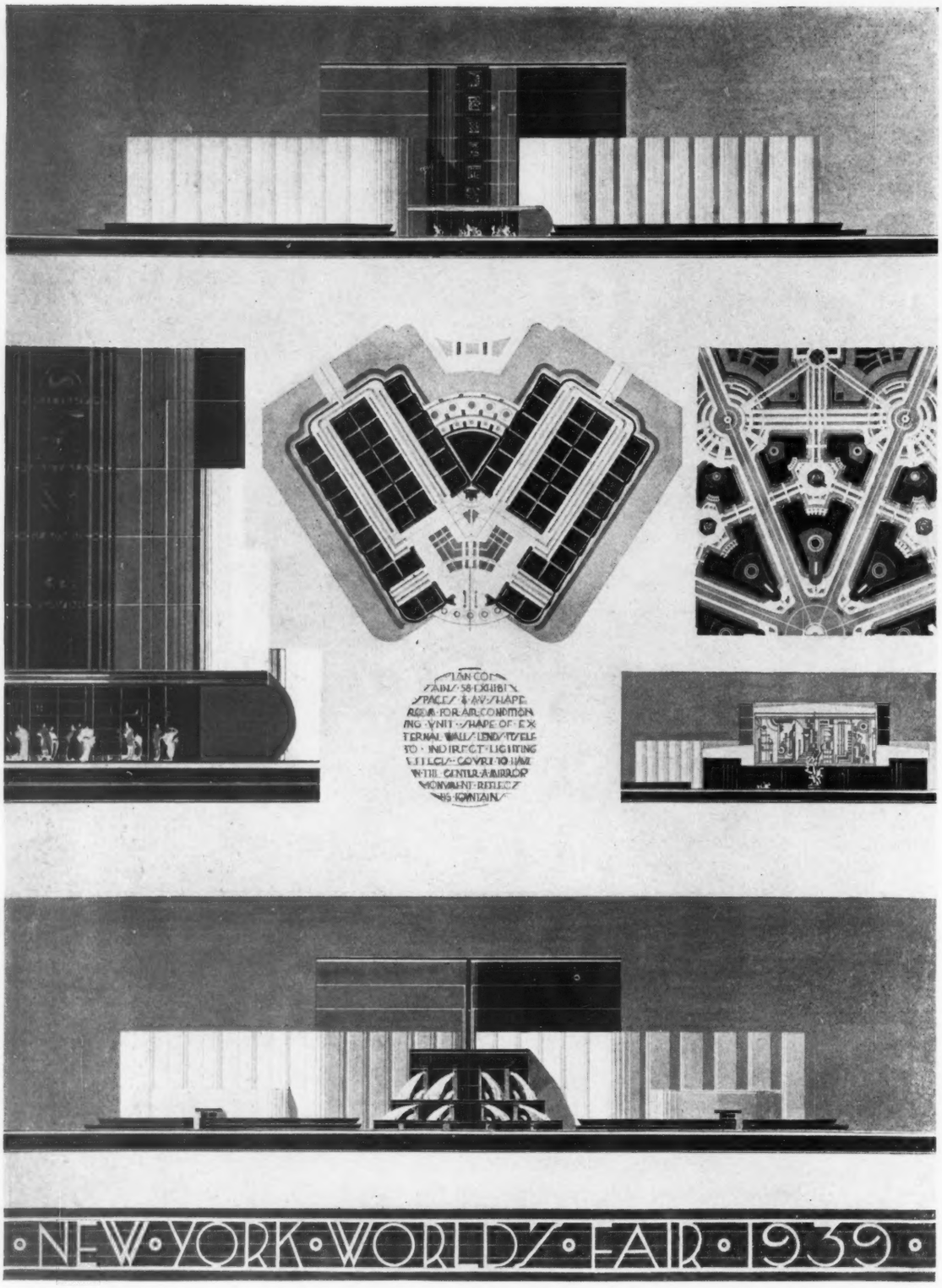
356 Designs were submitted in the competition which closed on October 9. They were judged in several sittings by a jury composed of Stephen F. Voorhees, Gilmore D. Clarke, William A. Delano, Jay Downer, Richmond H. Shreve, Walter Dorwin Teague, Charles Butler, William F. Lamb, Paul P. Cret, and Louis Skidmore. Robert D. Kohn was *Professional Adviser*. The jury investigated the status of all who received prizes and mentions and found them all duly registered.



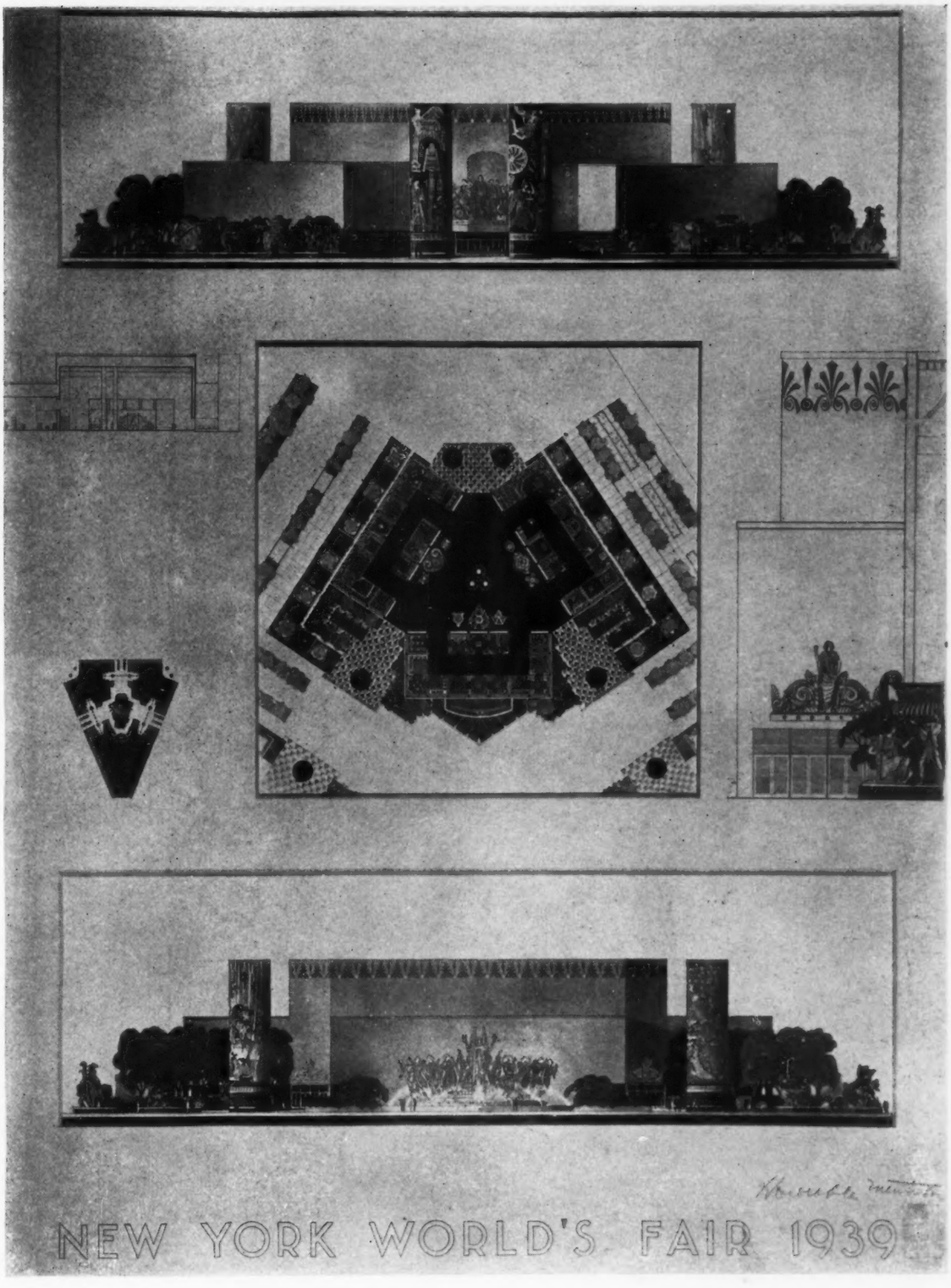
PETER COPELAND, AWARDED SECOND PRIZE, SHOWS A CLEVER USE OF PHOTOGRAPHY BUT HIS PLAN SUGGESTS THAT THE VISITOR PASSES BY THE EXHIBITS WITHOUT INTEREST. THE PLOT PLAN PROVIDES A LONG WALK WITHOUT SEEING MUCH. IN OTHER WORDS, THERE SEEMS MUCH MORE INTEREST IN THE OUTSIDE BILLBOARD THAN WITHIN THE WALLS



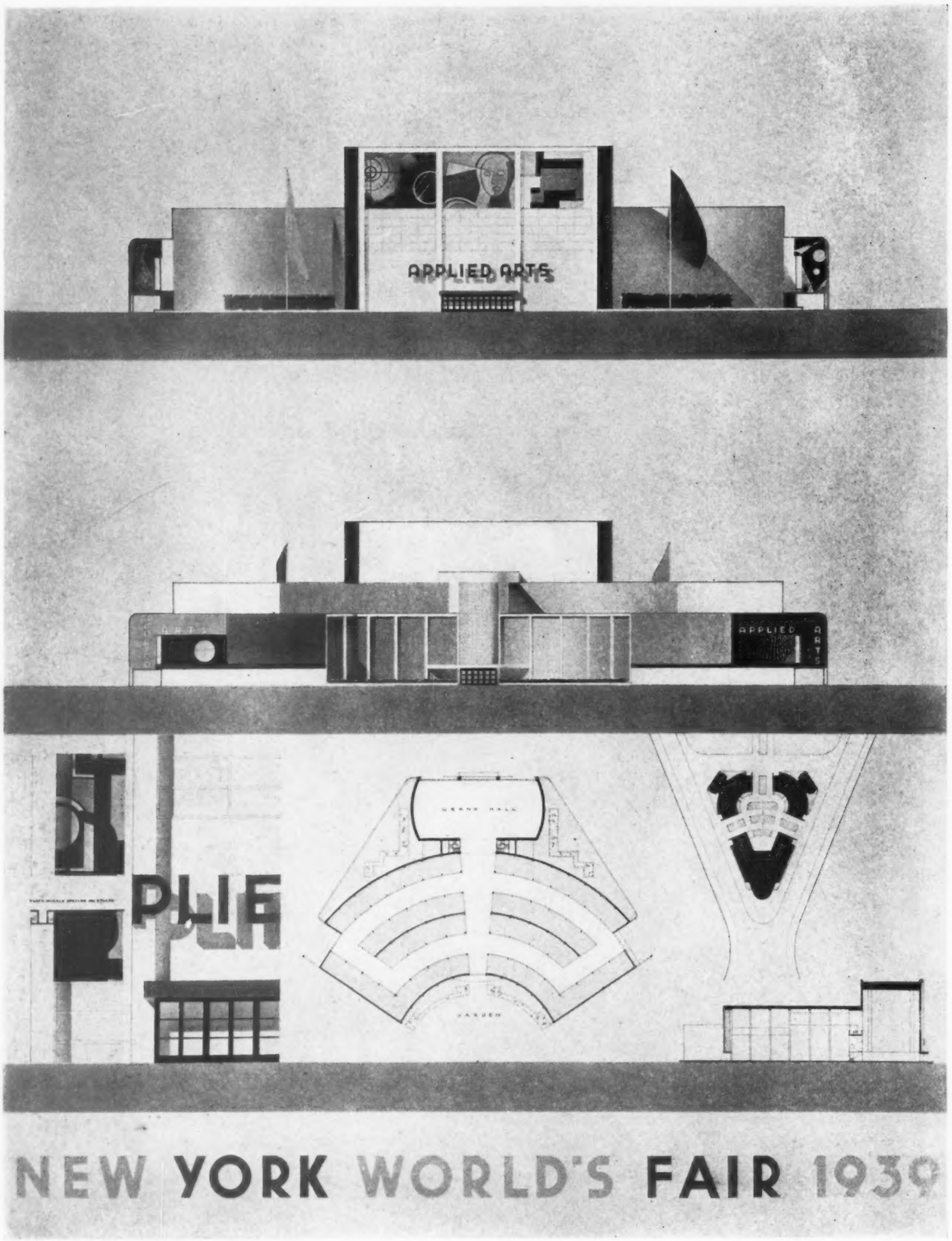
THE THIRD PRIZE DESIGN BY PERRY COKE SMITH COMBINES AN EXCEPTIONALLY GOOD PLAN, A FUNDAMENTALLY SOUND BUT UNNECESSARILY CONFUSED ELEVATION (WHICH IS, HOWEVER, PERFECT IN SCALE), AND A PLOT PLAN THAT IS PERHAPS THE ONLY ONE IN THE COMPETITION SHOWING ANY IMAGINATION. IT WOULD BUILD WELL



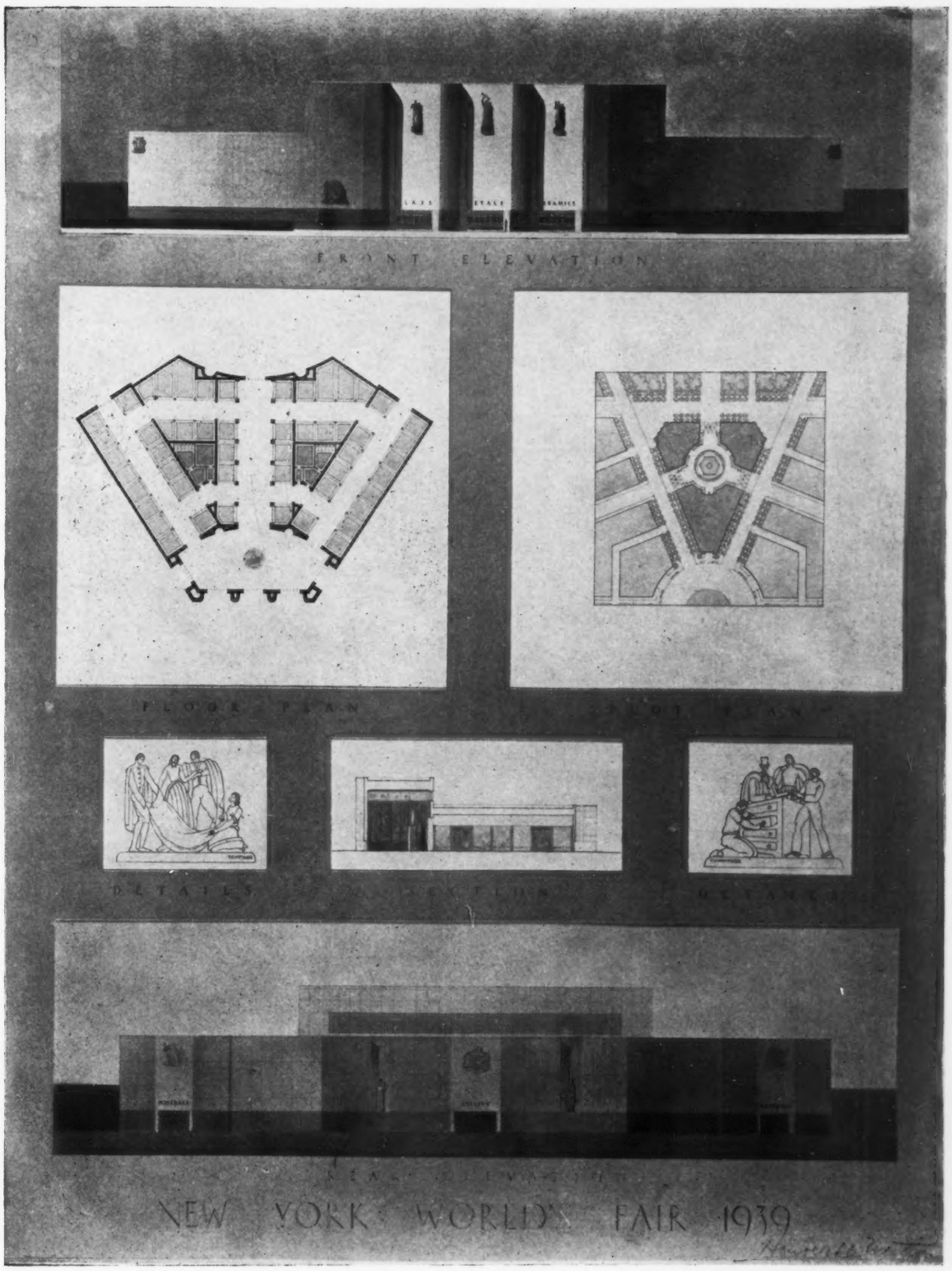
JOSHUA D. LOWENFISH RECEIVED A MENTION FOR THIS DESIGN WHICH, THOUGH CLEVERLY PRESENTED, HAS A BAD PLAN WHICH PRACTICALLY FORCES VISITORS BACK TO MAIN ENTRANCE FOR EXIT. THE PLOT PLAN IS A BAD EXAMPLE OF THE BEAUX ARTS INFLUENCE. DESIGN AS A WHOLE IS CLEAN CUT BUT IMPERSONAL AND UNEXPRESSIVE



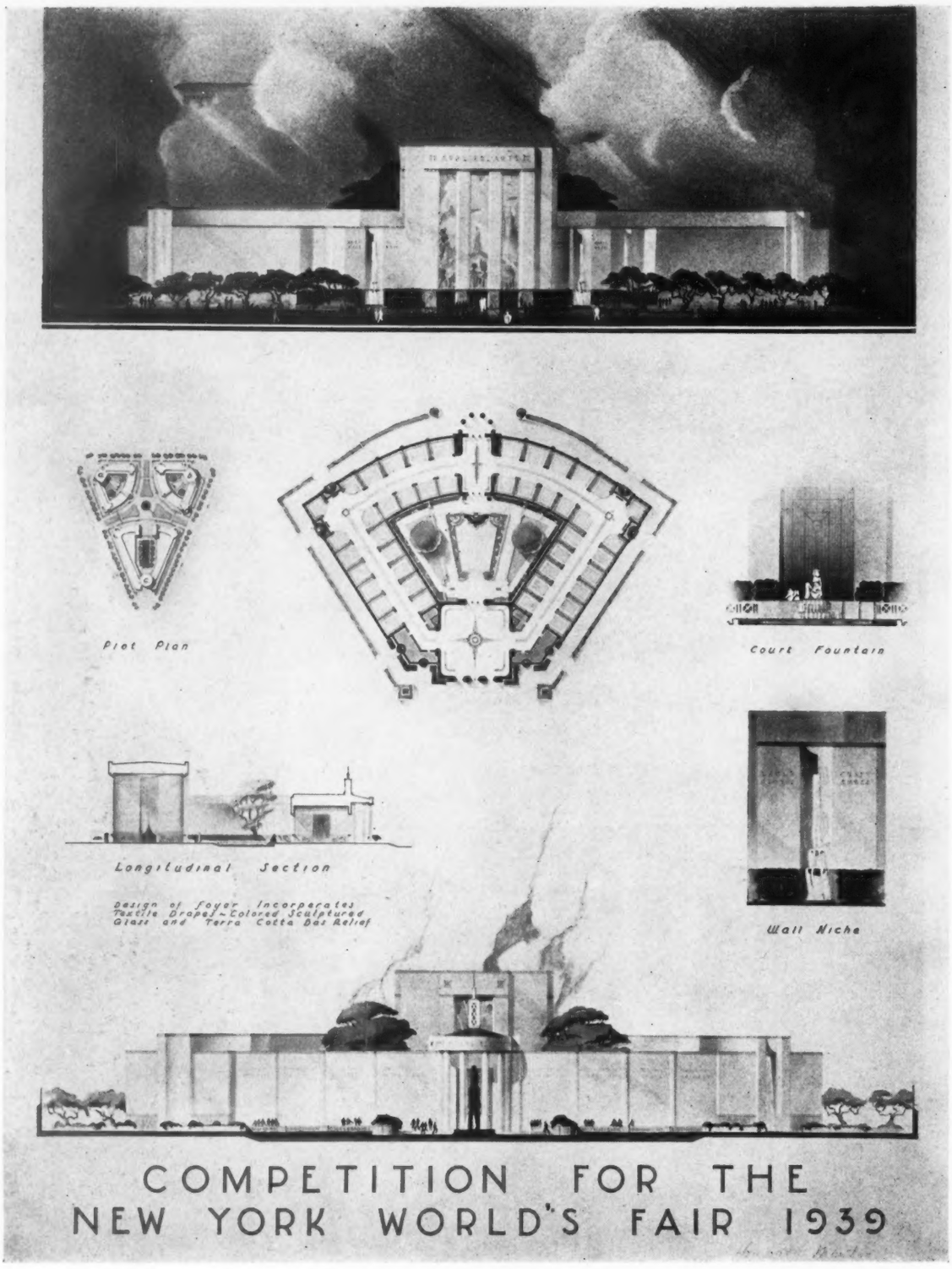
CARL LANDEFELD AND DON HATCH, WITH RENE CHAMBELLAN AS COLLABORATOR, PRODUCED IN THIS MENTION DESIGN A PIECE OF PURE DECORATION TOO BEAUTIFUL FOR WORDS. NO ATTEMPT HAS BEEN MADE TO CONTROL CIRCULATION AND VISITOR IS FREE TO STAY AND ENJOY OR LEAVE WITHOUT HINDRANCE. GOOD EXPOSITION



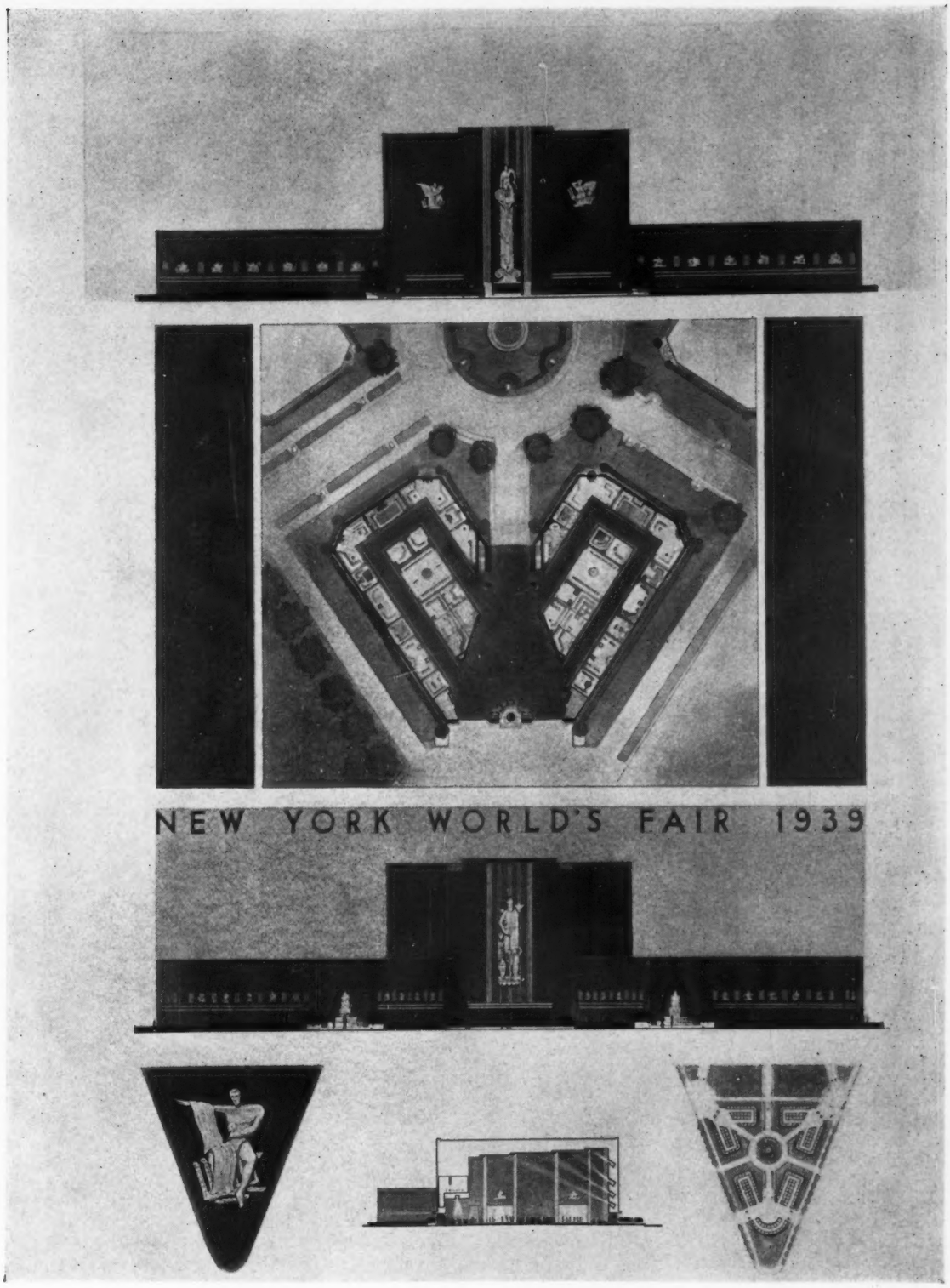
WILLIAM MUSCHENHEIM AND MORRISON BROUNN WON A MENTION WITH ONE OF THE BEST OF THE OBVIOUS SOLUTIONS WHICH HAS, HOWEVER, FUNDAMENTAL FAULTS. WITHIN THE LIMITS OF THE PROBLEM THE PLAN IS WELL REASONED BUT THE PLOT PLAN SHOWS NO IMAGINATION. EXTERIOR IS HONEST AND FRANK AND GOOD EXPOSITION



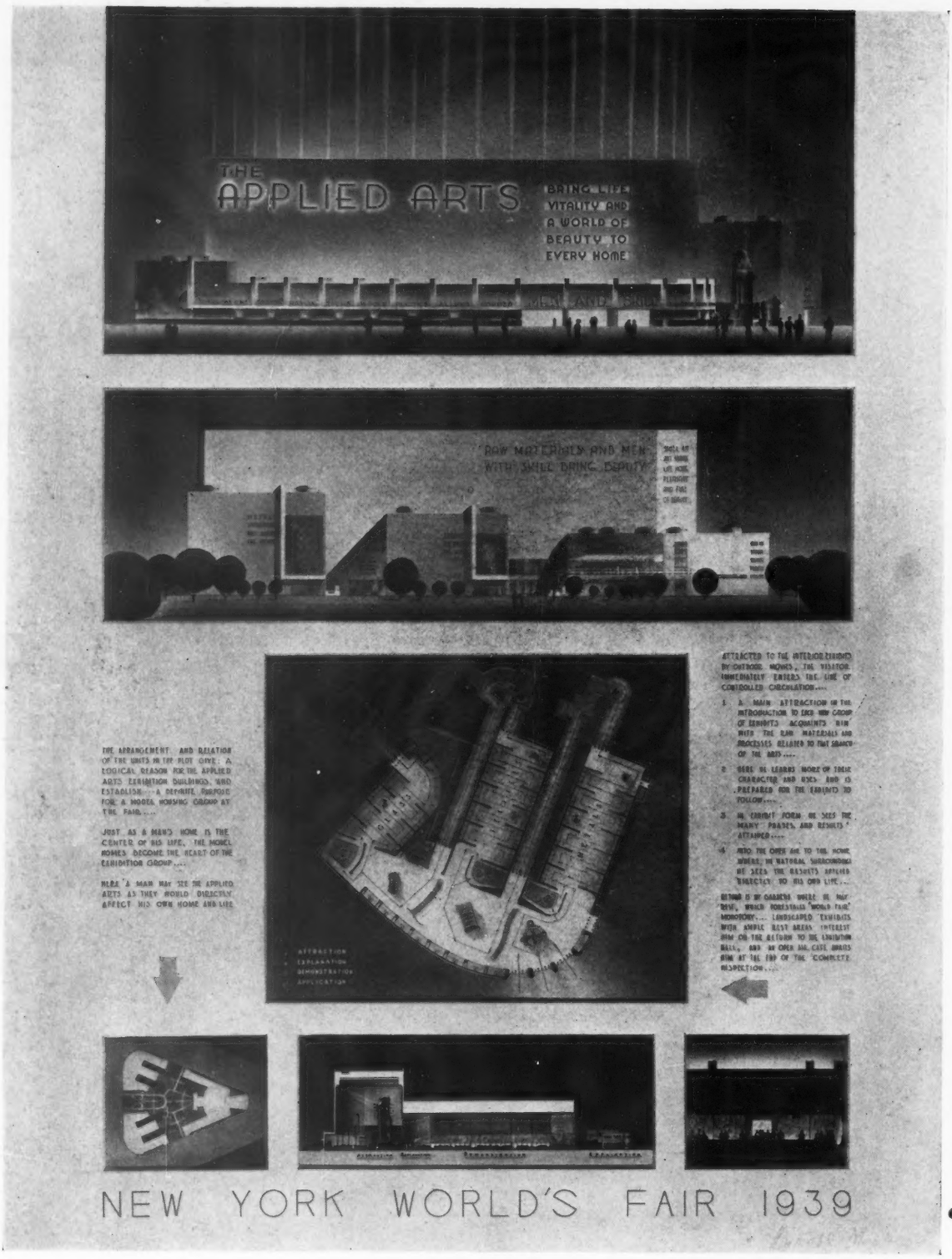
FRANCIS KEALLY'S MENTION DESIGN OFFERS MONUMENTAL AND WELL COMPOSED ELEVATIONS WITH A PLAN THAT PROVIDES THE VISITOR WITH PERHAPS TOO MANY CHOICES THAT MIGHT BE CONFUSING. THE PLOT PLAN IS UNIMAGINATIVE AND THE ENTIRE GROUP WOULD TIRE BY ITS BIGNESS. TYPE UNSUITABLE FOR REPETITION


Plot Plan
Court Fountain
Longitudinal Section
Design of foyer incorporates Textile Drapes ~ Colored Sculptured Glass and Terra Cotta Bas Relief
Wall Niche
COMPETITION FOR THE
NEW YORK WORLD'S FAIR 1939

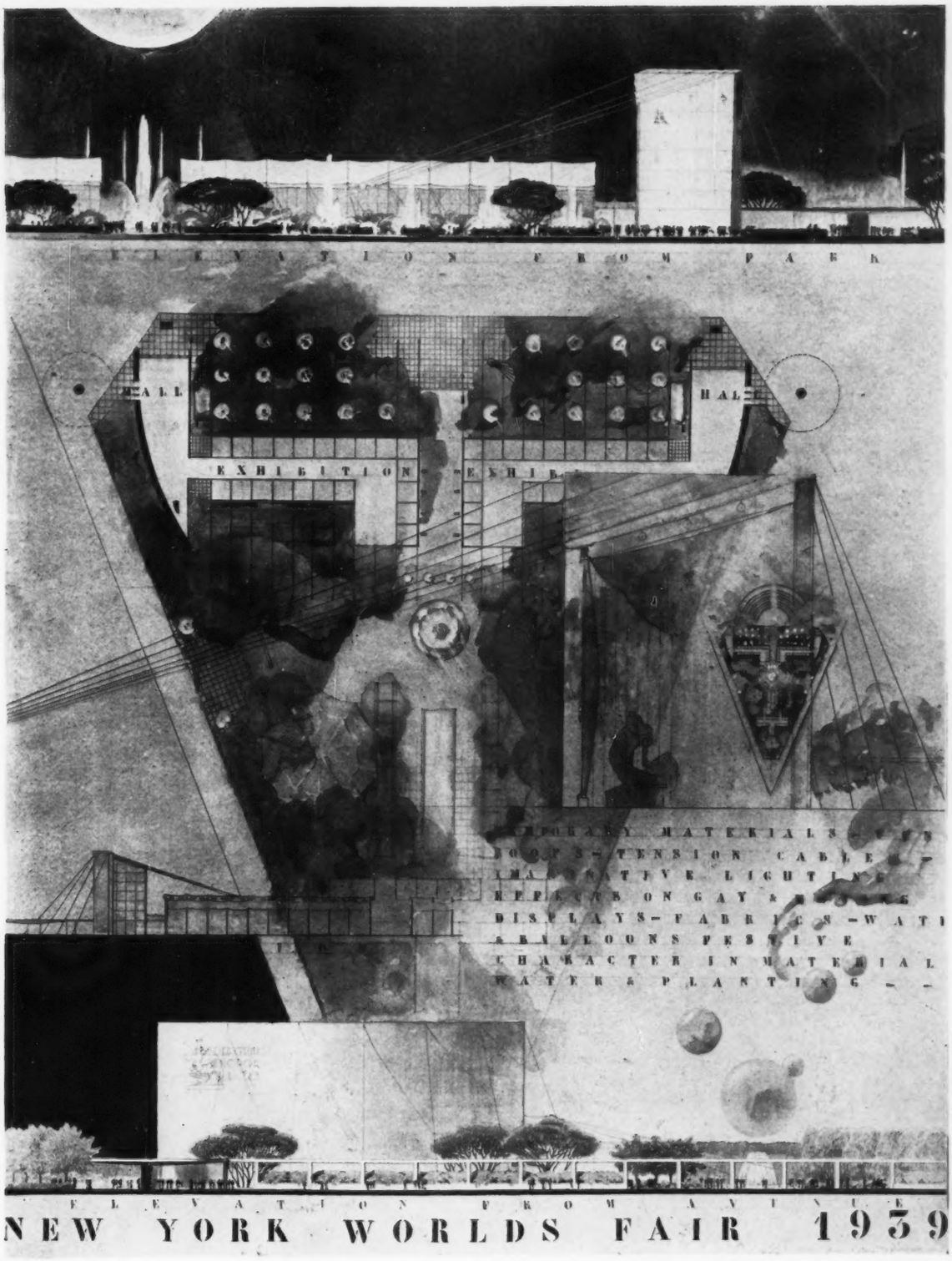
DWIGHT JAMES BAUM GETS A MENTION WITH A PLAN WHICH IS AN OBVIOUS SOLUTION OF THE PROGRAM BUT WHICH RETURNS UPON ITSELF AND GIVES NO OPPORTUNITY FOR EXHIBIT EXCEPT AS A STALL IN AN UNINTERESTING CORRIDOR. SCALE OF EXTERIORS IS RATHER FORBIDDING AND NOTHING SAYS TO THE VISITOR, "COME IN"



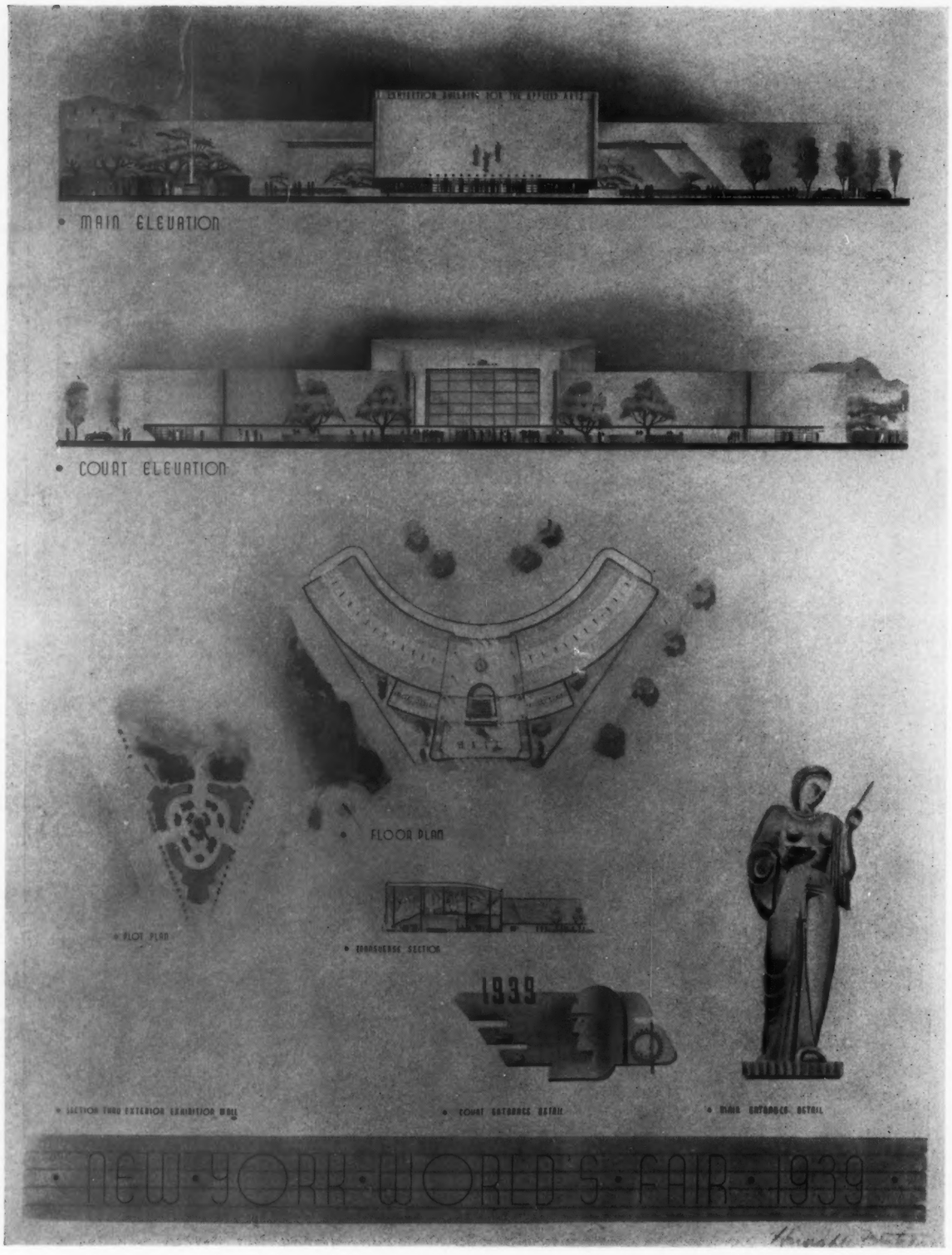
ASPINWALL AND SIMPSON PROVIDE, IN THEIR MENTION DESIGN, ELEVATIONS OF CLEVER SIMPLICITY WITH ENTRANCES THAT ARE MUCH MORE INTERESTING THAN THE EXHIBITS COULD BE. PLOT PLAN SHOWS STRESS UPON CIRCULATION STRAIGHT THROUGH THE BUILDINGS RATHER THAN WITHIN. SPLIT CIRCULATION IS A FAULT


THE
APPLIED ARTS
BRING LIFE
VITALITY AND
A WORLD OF
BEAUTY TO
EVERY HOME
RAW MATERIALS AND MEN
WITH SKILL BRING DEPUTY
THE ARRANGEMENT AND RELATION
OF THE UNITS IN THE PLOT GIVE A
LOGICAL REASON FOR THE APPLIED
ARTS EXHIBITION BUILDINGS, AND
ESTABLISH ... A DEFINITE PURPOSE
FOR A MODEL HOUSING GROUP AT
THE FAIR. ...
JUST AS A MAN'S HOME IS THE
CENTER OF HIS LIFE, THE MODEL
HOMES BECOME THE HEART OF THE
EXHIBITION GROUP ...
HERE A MAN MAY SEE THE APPLIED
ARTS AS THEY WOULD DIRECTLY
AFFECT HIS OWN HOME AND LIFE
ATTRACTED TO THE INTERIOR EXHIBITS
BY OUTDOOR SIGNS, THE VISITOR
IMMEDIATELY ENTERS THE LINE OF
CONTROLLED CIRCULATION ...
1 A MAIN ATTRACTION OR THE
INTRODUCTION TO EACH NEW GROUP
OF EXHIBITS ACQUAINTS HIM
WITH THE RAW MATERIALS AND
PROCESSES RELATED TO THAT BRANCH
OF THE ARTS ...
2 HERE HE LEARNS MORE OF THESE
CHARACTER AND USES AND IS
PREPARED FOR THE EXHIBITS TO
FOLLOW ...
3 IN EXHIBIT FORM HE SEES THE
MANY PHASES AND RESULTS
ATTAINED ...
4 INTO THE OPEN AIR TO THE HOME
WHERE IN NATURAL SURROUNDINGS
HE SEES THE RESULTS APPLIED
DIRECTLY TO HIS OWN LIFE ...
ATTRACTION
EXPLANATION
DEMONSTRATION
APPLICATION
NEW YORK WORLD'S FAIR 1939

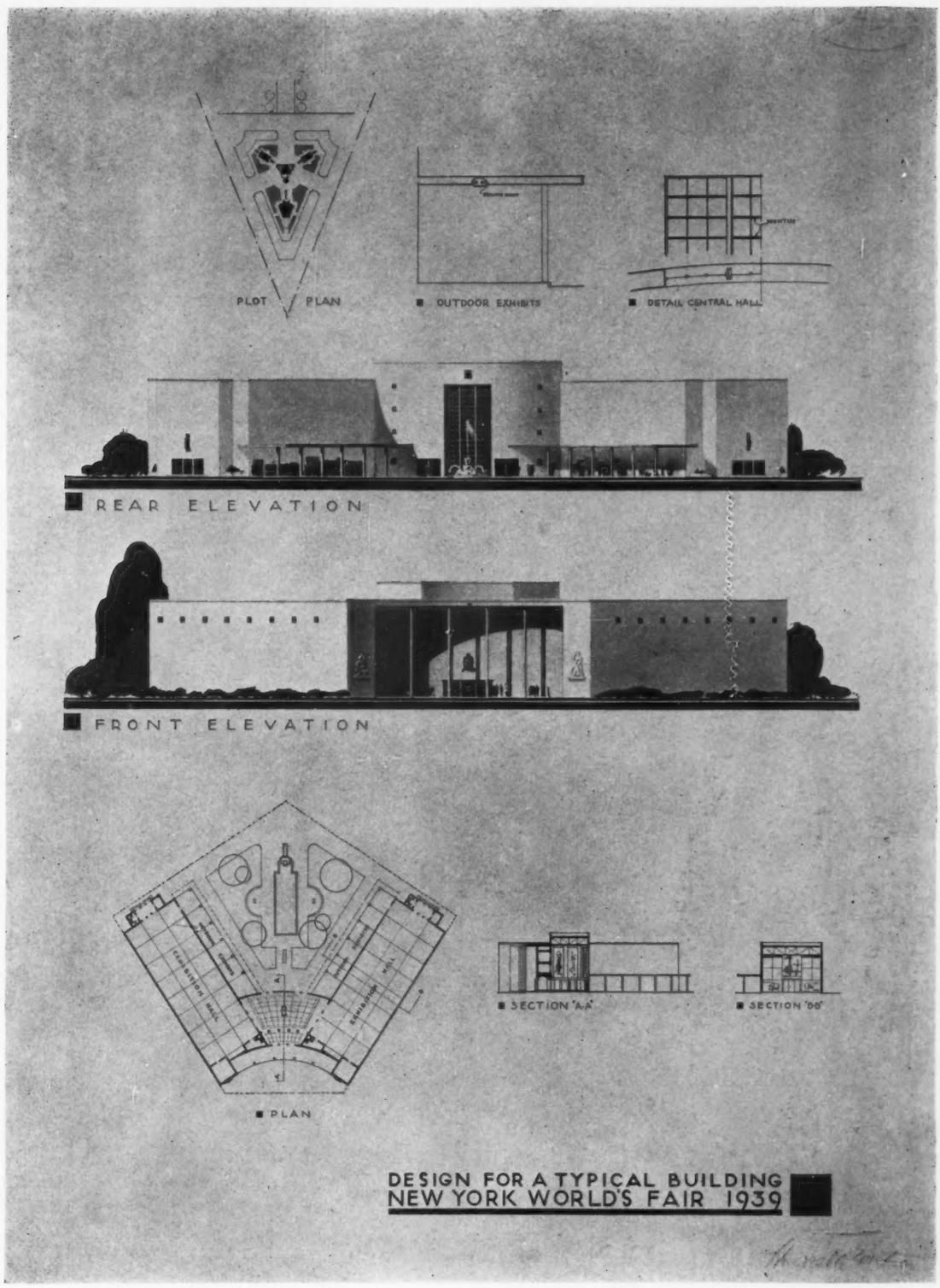
J. GORDON CARR RECEIVED ONLY A MENTION FOR A DESIGN THAT MERITS A PRIZE. HIS THOUGHTFUL, CAREFUL PLAN SHOWS A FINE UNDERSTANDING OF THE NATURE OF EXHIBITION SPACE. THE ELEVATIONS ARE NEEDLESSLY BARREN AND IF MULTIPLIED THROUGHOUT AN EXPOSITION WOULD PRODUCE UNPLEASANT BILLBOARDY EFFECT



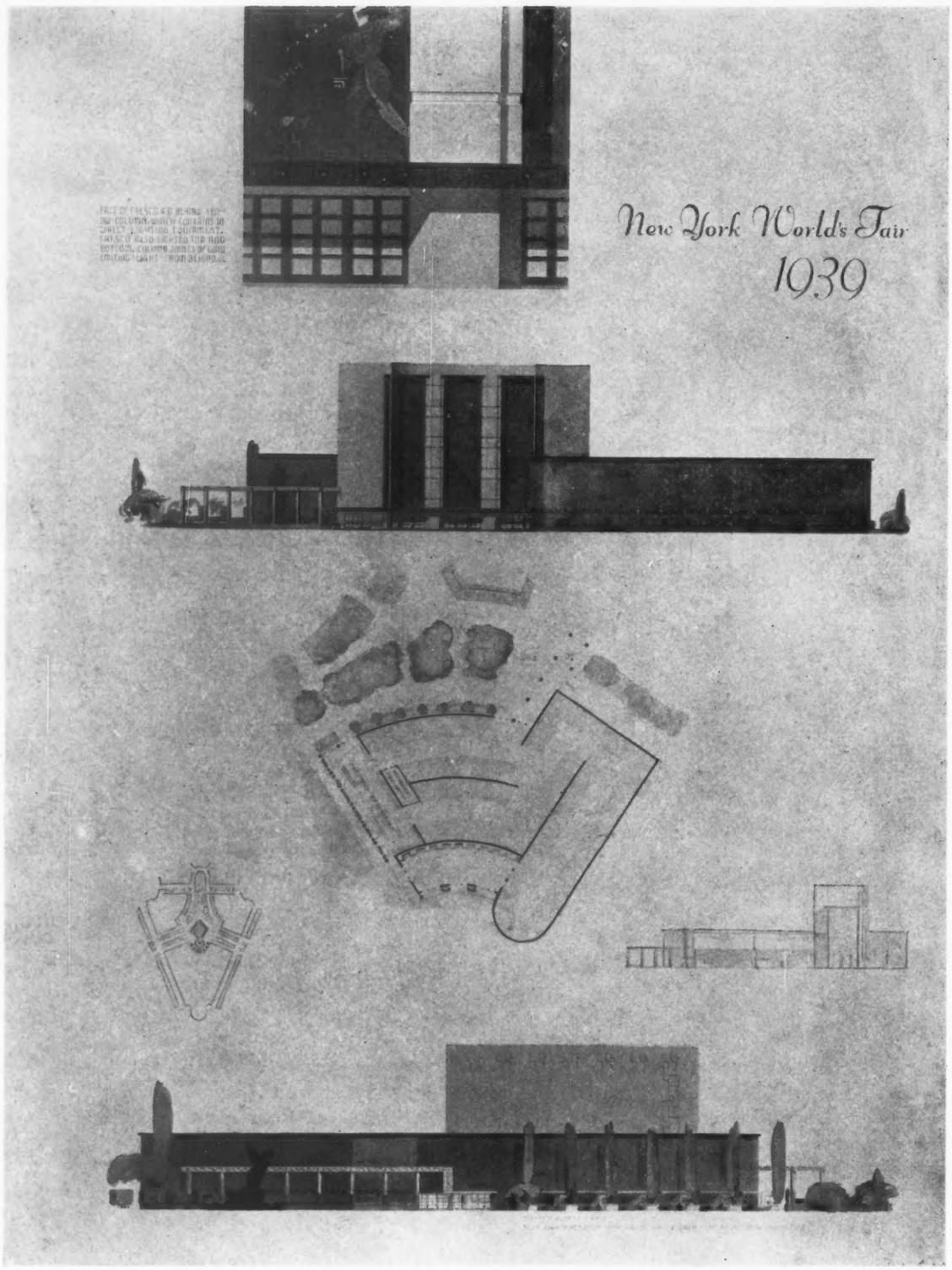
HARRISON AND FOUILHOUX WON THEIR MENTION BY A VERY UNUSUAL SOLUTION, FRANKLY TEMPORARY IN CHARACTER. THE PLAN IS EXCELLENT—SIMPLE AND DIRECT —WITH PLENTY OF OUTDOOR SPACE ON PLOT PLAN FOR FESTIVE ATMOSPHERE. THIS TYPE OF BUILDING IS MOST APPROPRIATE FOR AN EXPOSITION AND SHOULD BE BUILT



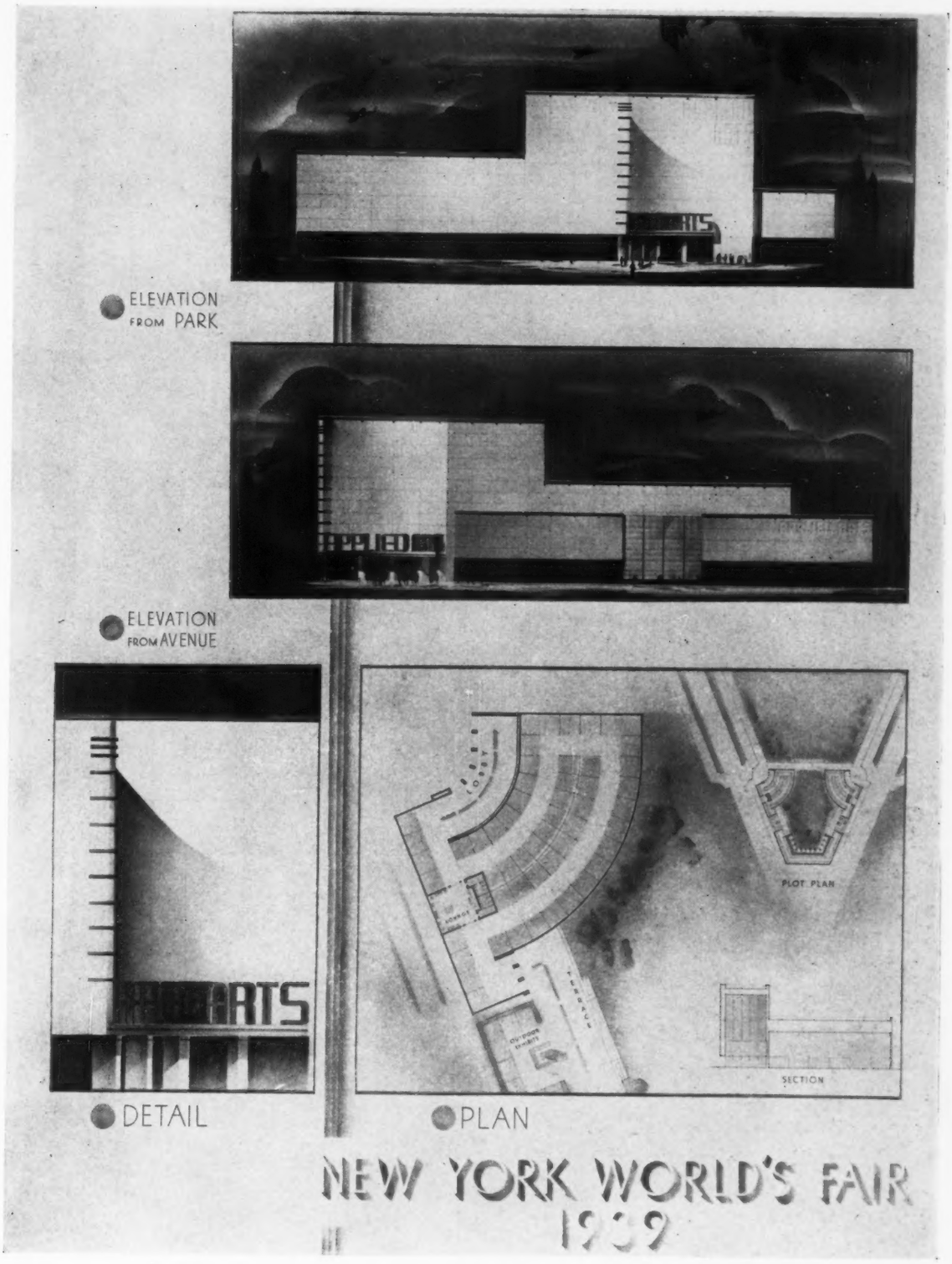
LOUIS ALLEN ABRAMSON WAS GIVEN A MENTION BUT HIS PLAN HAS THE OBVIOUS FAULT OF FORCING VISITOR TO RETRACE STEPS AGAINST TRAFFIC TO SEE ENTIRE SHOW OR ELSE GO THROUGH WHOLE GROUP AND RETURN—A FOOT-WEARY SCHEME. ELEVATIONS ARE SIMPLE BUT APPARENTLY RESULTED FROM DESIRE TO BE MODERN



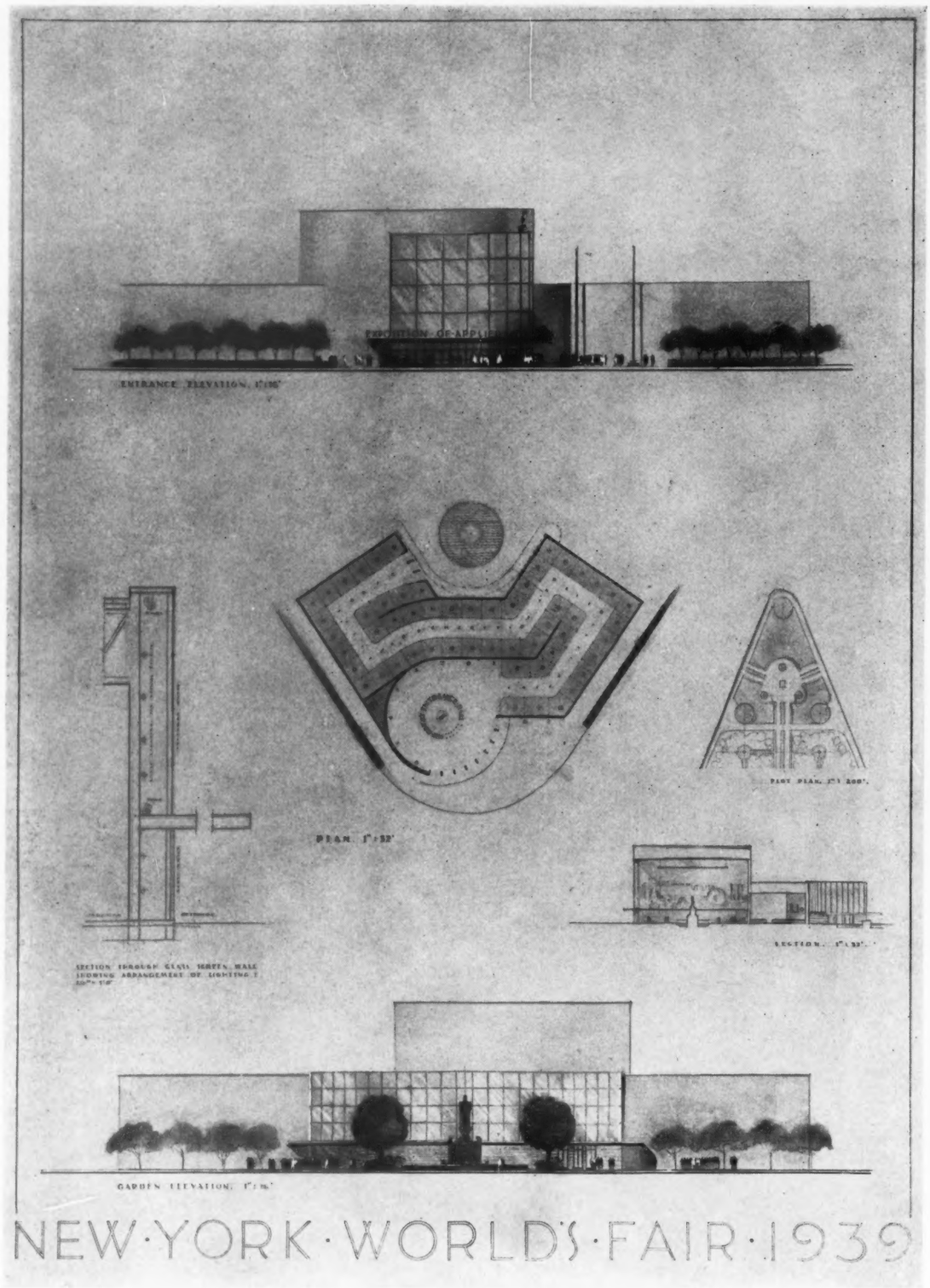
LEONARD DEAN, IN HIS MENTION DESIGN, ALSO DETERMINES TO BE MODERN AND DOES IT BETTER. HIS PLAN OFFERS OPPORTUNITY FOR RETURN THROUGH AN OUTSIDE EXHIBIT TO THE STARTING POINT— A SCHEME THAT WOULD CAUSE A CONFUSED MILLING AROUND OF PEOPLE INSIDE ENTRANCE. EXTERIORS ARE GOOD EXPOSITION



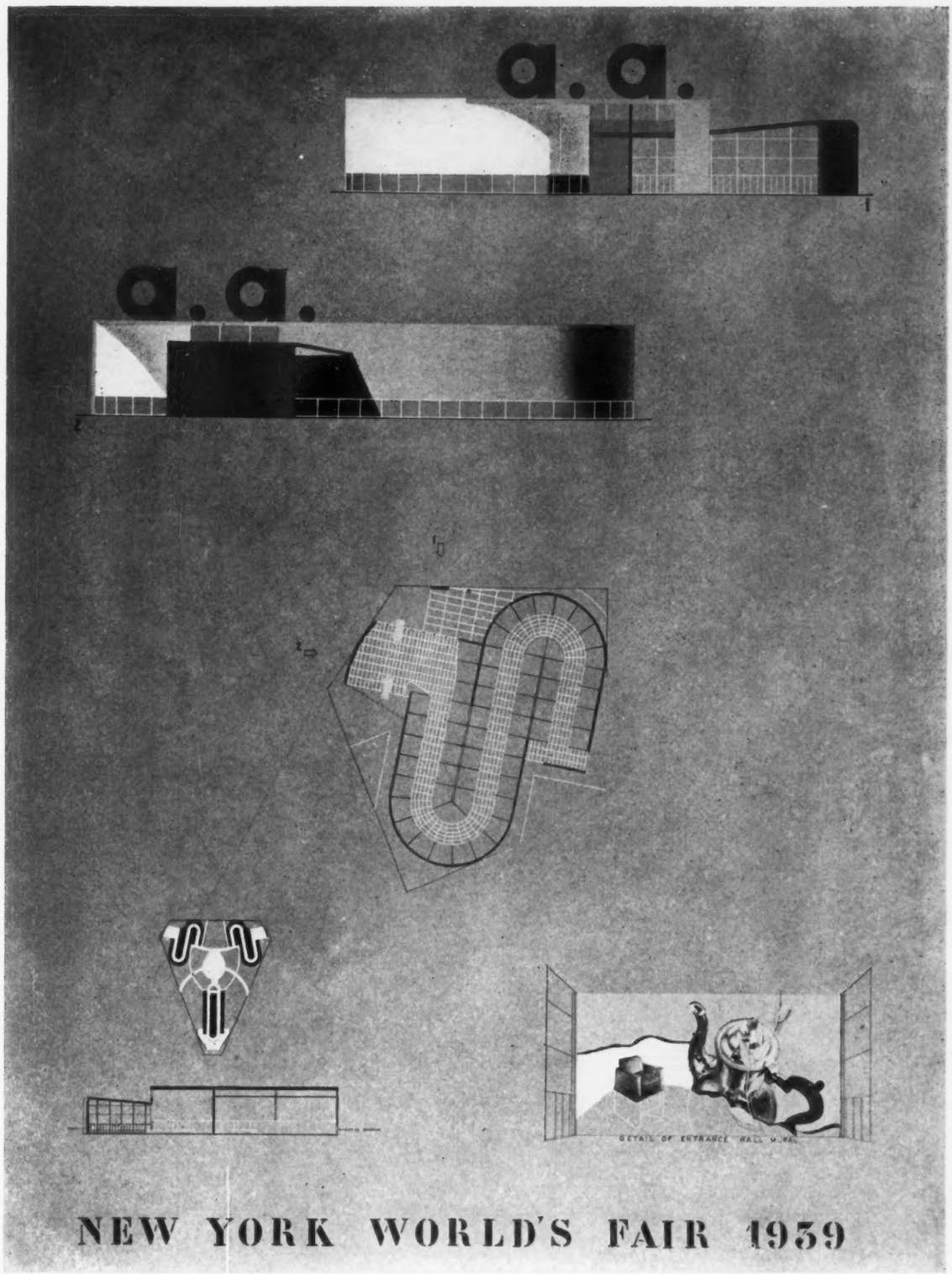
ROBERT W. CUTLER PROVIDES FOR HIS MENTION A GOOD EXPOSITION PLAN AND GOOD EXPOSITION ARCHITECTURE. THE WESTERN FALSE FRONT WOULD MAKE AN UNPLEASANT INTERIOR HALL. IT IS OBVIOUS, HOWEVER, THAT A GOOD PLAN GIVES A BASIS FOR A GOOD ELEVATION. MONOTONY HAS BEEN CLEVERLY AVOIDED IN THIS DIRECT PLAN



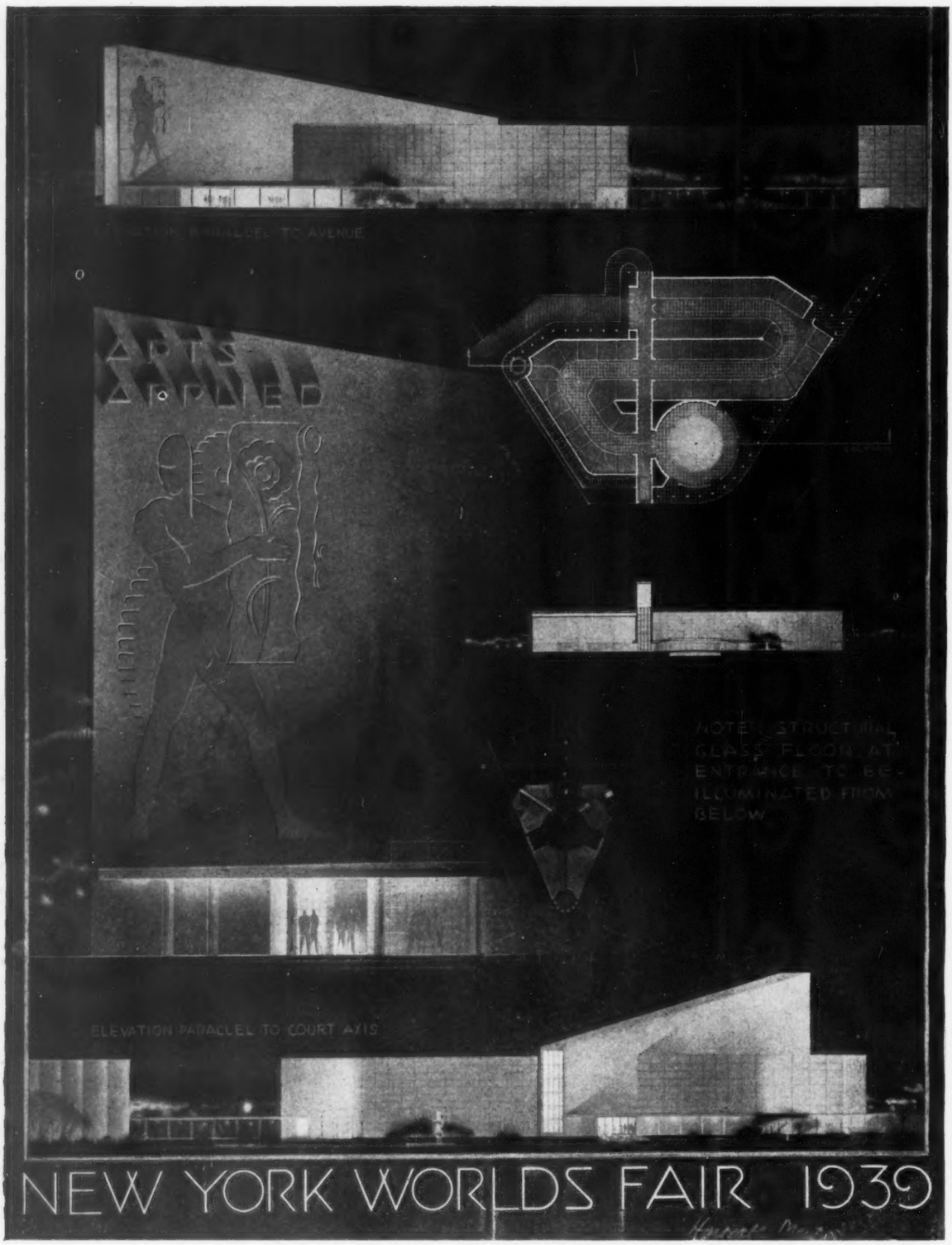
RALPH E. LEFF AND MAX FELDMAN SHOW BY THEIR MENTION DESIGN THAT A GOOD PRINCIPLE CAN BE CARRIED TOO FAR. WHILE IT IS DESIRABLE TO OBTAIN A FLOW CIRCULATION, IT IS ALSO DESIRABLE TO OFFER VARIETY OF INTEREST AND OPPORTUNITY FOR ESCAPE. ELEVATIONS TOO SEVERE FOR A FAIR WHICH IS AN AMUSEMENT PLACE



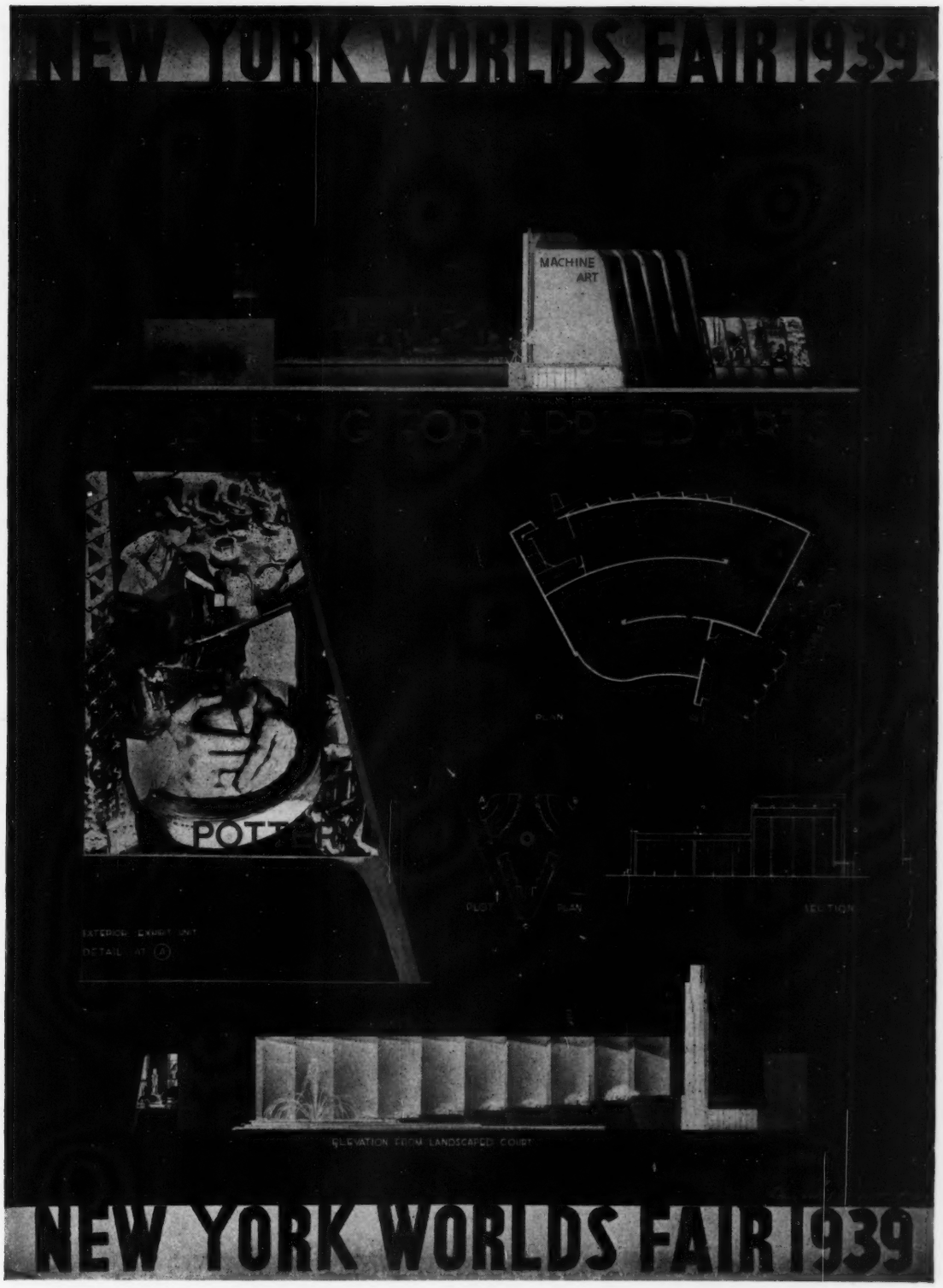
MORRIS KETCHUM, JR., AND RICHARD BORING SNOW GOT A MENTION FOR A GOOD PLAN WHICH, HOWEVER, MERITS THE SAME CRITICISM AS FOR THE PRECEDING DESIGN. THE CONSTANTLY CHANGING VISTA IS GOOD. THE ELEVATIONS AGAIN SHOW LACK OF UNDERSTANDING THAT THE AVERAGE MAN COMES TO THE FAIR FOR ENTERTAINMENT



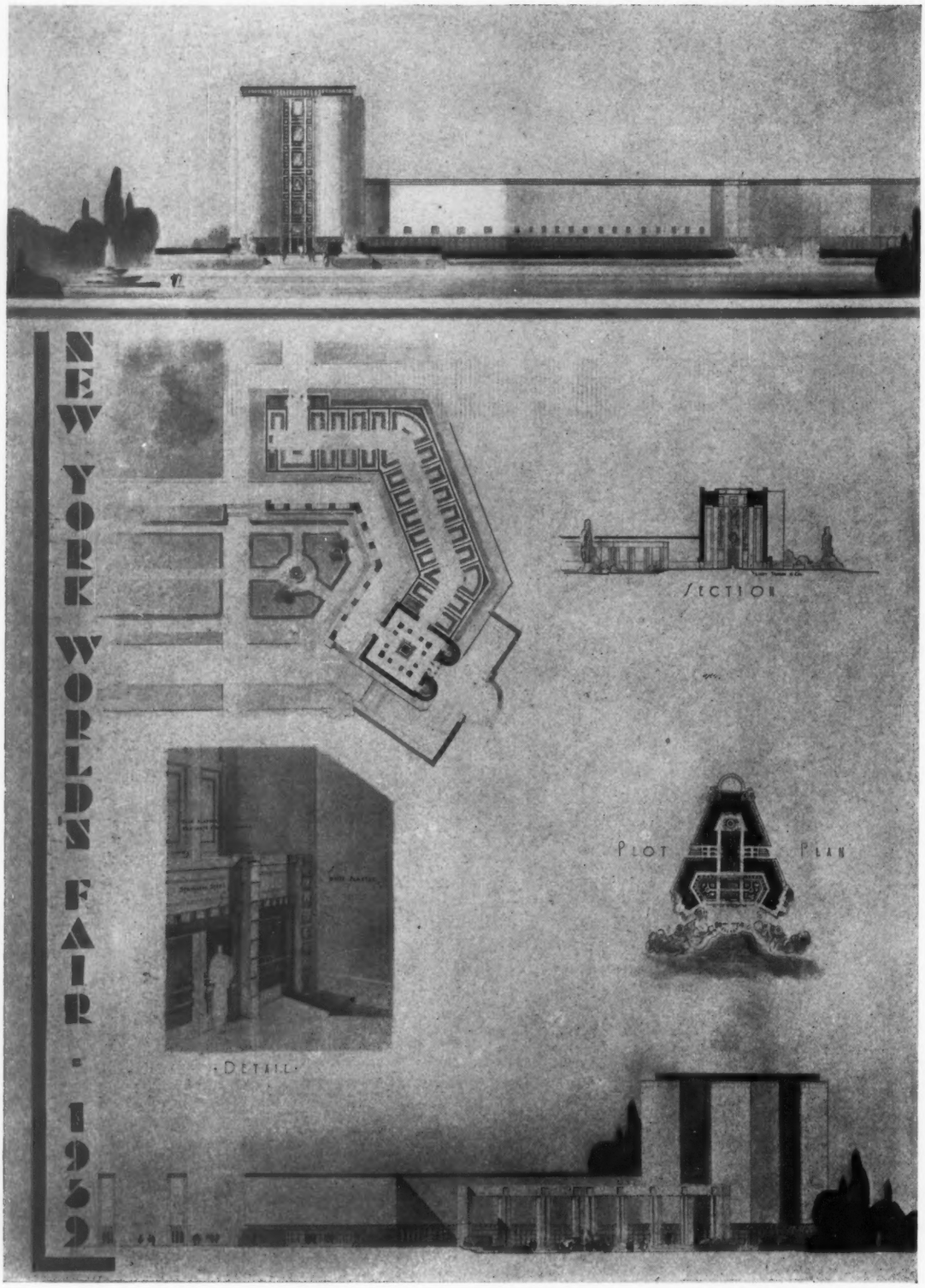
ROBERT W. McLAUGHLIN AND STAMO PAPADAKI DESERVE THEIR MENTION BY REASON OF A PLAN THAT HAS POINTS OF EXCELLENCE. THEIR PLOT PLAN, HOWEVER, SEEMS HIGHLY UNIMAGINATIVE AND GIVES NOTHING TO INVITE THE VISITOR TO PROCEED FROM ONE BUILDING TO ANOTHER. REPEATING THIS PLAN REVERSED IS ILLOGICAL



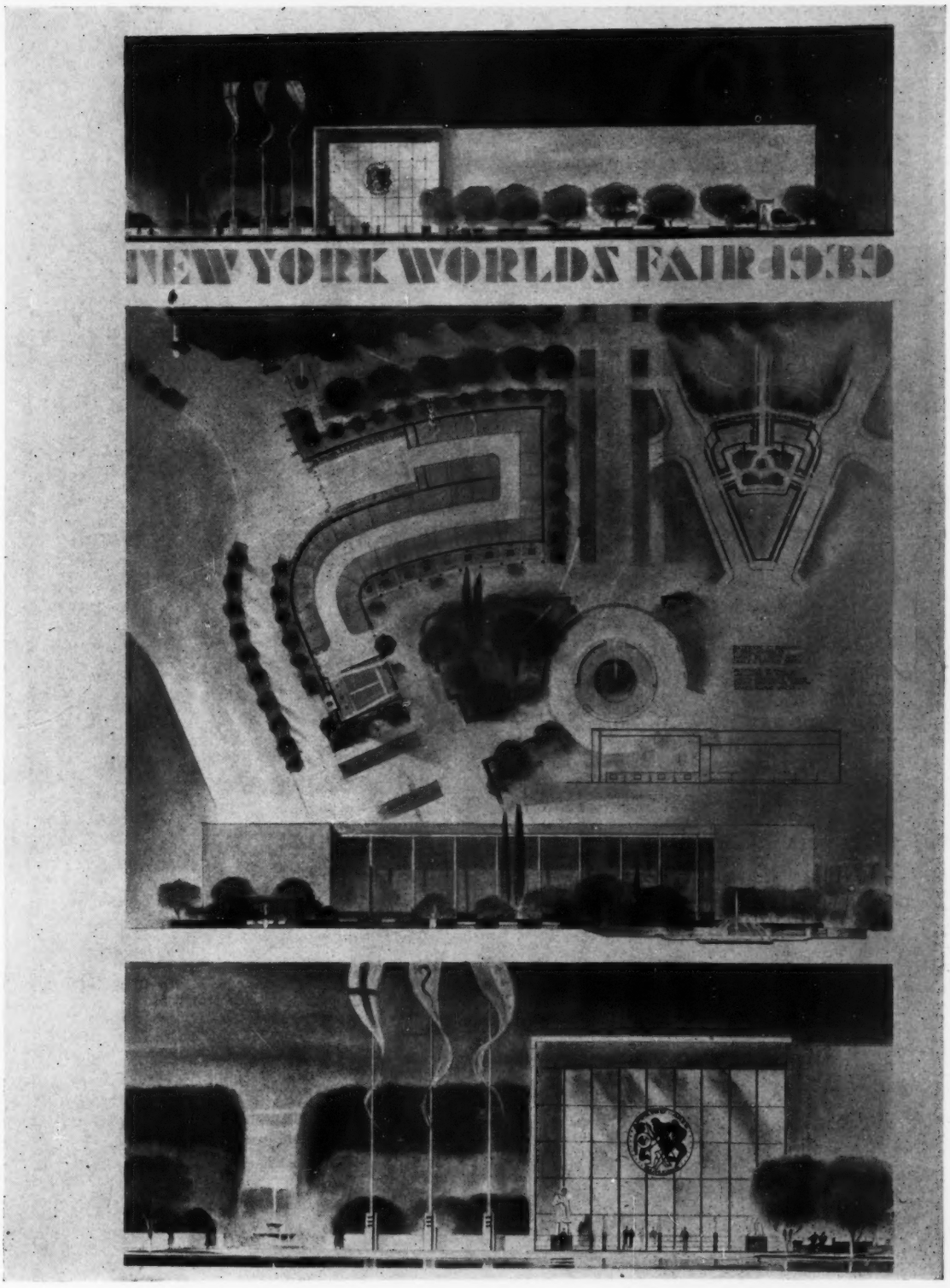
FREDERICK G. FROST, JR., MENTION WINNER, GIVES US A MOST EXCELLENT PLAN WHICH OFFERS THE VISITOR SOME CHOICE AND YET PROVIDES THE FLOW TYPE OF CIRCULATION. HIS WHOLE SOLUTION IS CREDITABLY IMAGINATIVE, EMPLOYING COMBINATIONS OF FORMS WHICH LEND THEMSELVES WELL TO FESTIVE ARRANGEMENTS



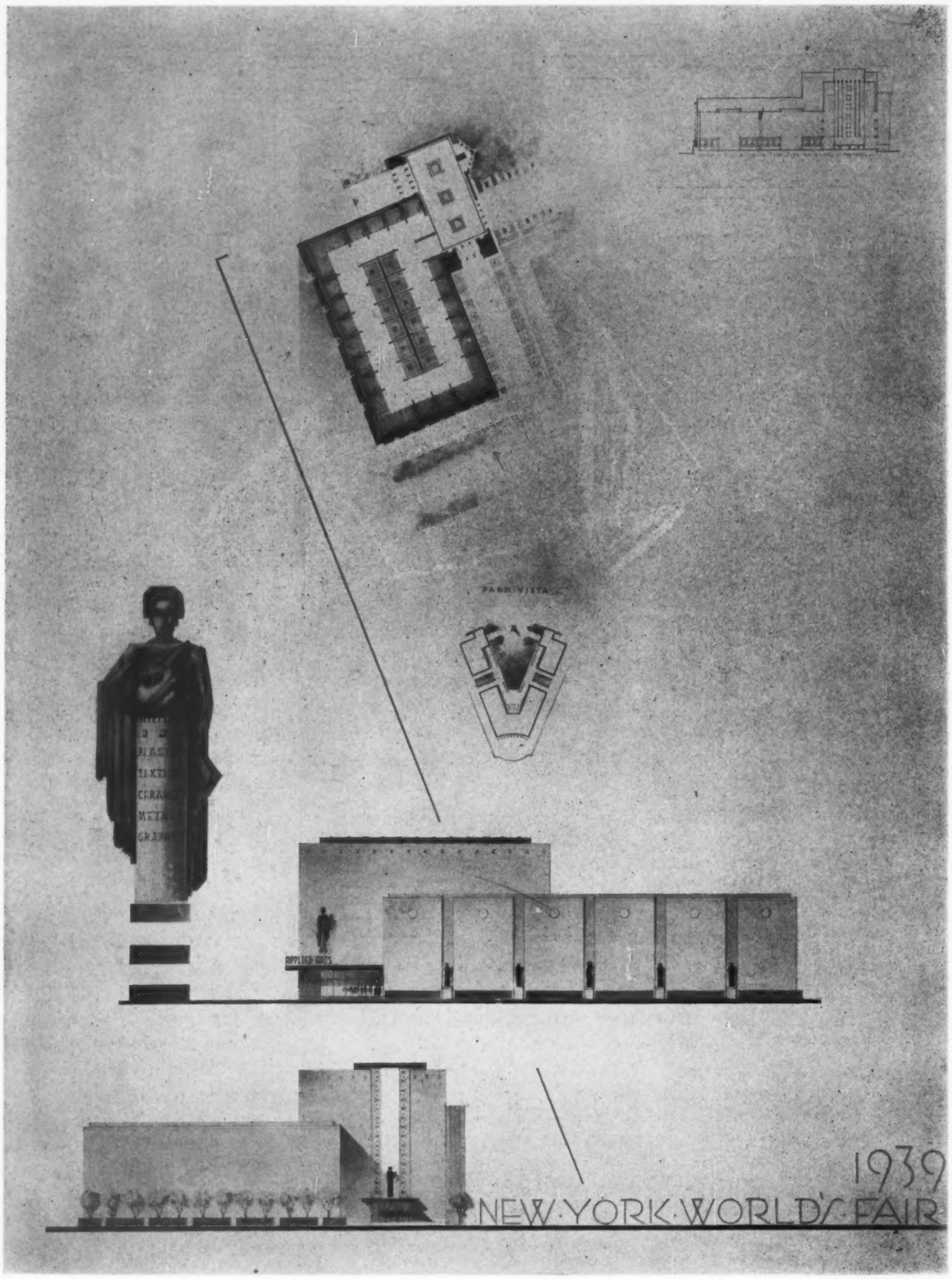
I. WOODNER-SILVERMAN PLACED AMONG THE MENTIONS WITH A PLAN THAT GIVES THE VISITOR NO CHANCE TO ESCAPE. AN ENTIRE EXPOSITION DONE ON THIS PRINCIPLE WOULD BE EXHAUSTING NO END. THE EXTERIORS ARE SOMEWHAT TRICKY, WITH GOOD USE OF PHOTO MURALS AND A GENERAL FEELING APPROPRIATE TO EXPOSITIONS



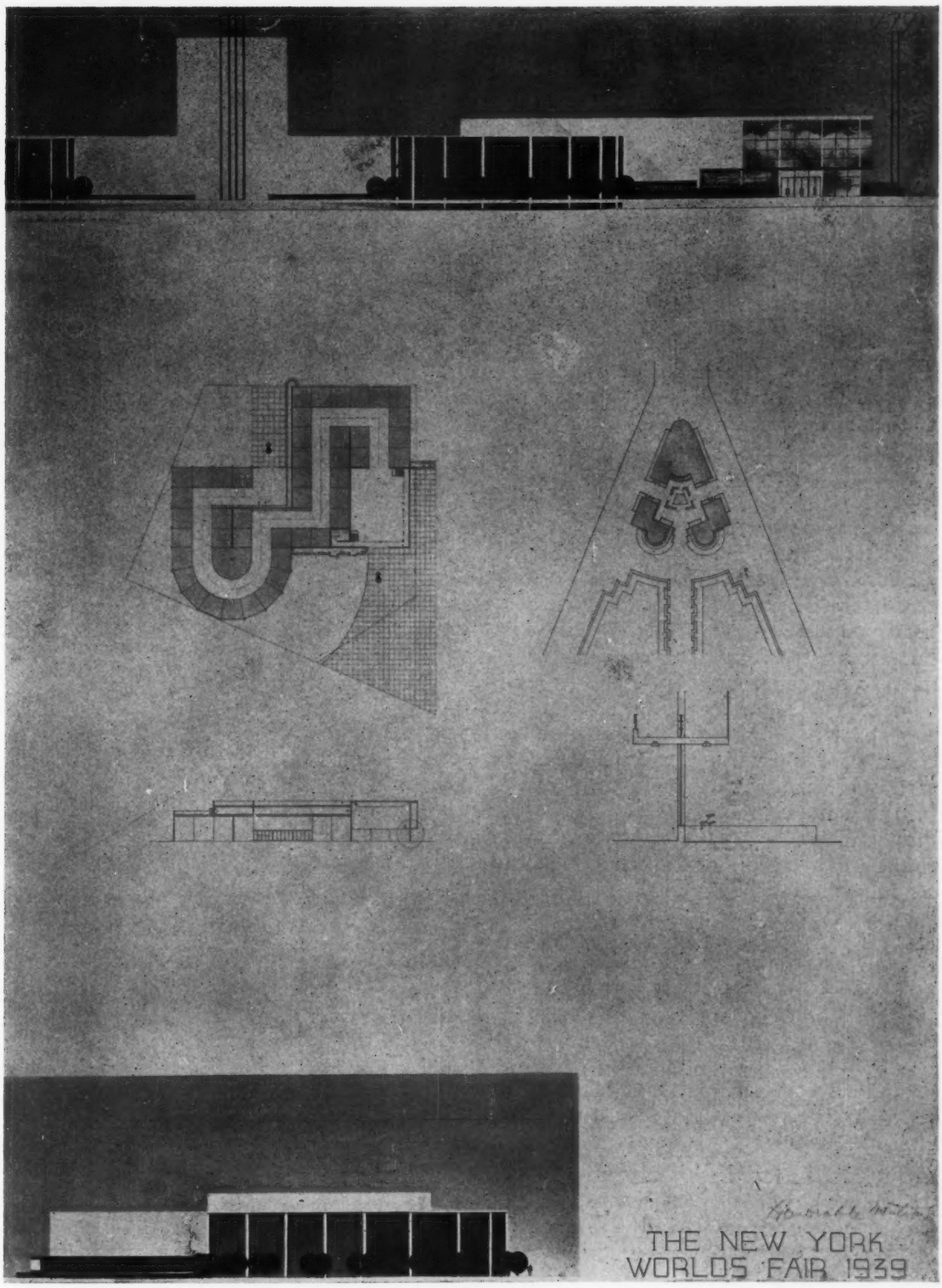
FRANK E. JOHNSON AND CHARLES F. SCHILLINGER GOT A MENTION FOR A DESIGN WITH QUITE INTERESTING CIRCULATION, ESPECIALLY AS IT WORKS ON THE PLOT PLAN. THE GREAT COURT COULD BE A VERY GOOD FEATURE IF HANDLED WITH SKILL. THE ELEVATIONS FOR THIS DESIGN ARE NOT PARTICULARLY INSPIRED, ARE THEY?



MAXMILIAN B. BOHN AND CHARLES BEESTON HAVE ARRANGED, IN THEIR MENTION DESIGN, FOR UNINTERRUPTED FLOW CIRCULATION UP TO THE POINT WHERE THE VISITOR IS READY TO GO TO THE NEXT BUILDING, WHEN THEY STOP HIM. HAS SAME FAULT AS SYMMETRICAL SCHEMES. ELEVATIONS ARE QUIET BUT NOT DISTINGUISHED



JOHNSON AND BIRNBAUM'S MENTION DESIGN HAS A PLAN THAT IS DIFFERENT FROM ANY OF THE OTHERS SHOWN. IT HAS THE FAULT, NOTED IN SOME OF THE OTHERS, OF MAKING THE VISITOR RETURN TO HIS STARTING POINT TO GET OUT, WITH NO ESCAPE IN BETWEEN. THE SIMPLE FORM OF THE PLAN LEADS TO CLEAN, SIMPLE MASSES



JOHN HIRONIMUS, IN HIS MENTION PLAN, SHOWS THE FAULT OF CONTINUOUS INESCAPABLE FLOW BUT BREAKS IT UP INTERESTINGLY BY FREQUENT CHANGES OF DIRECTION. HIS ELEVATIONS ARE SIMPLE AND DIRECT AND SHOW A NICE SENSE OF THE EFFECT OF WELL DISPOSED MASSES WHOSE ASPECTS CHANGE AS YOU MOVE AROUND

CHRISTMAS AND THE PROFESSION

1936

For lo! these many years—it sometimes seems like a lifetime—Christmas has not been a season for great rejoicing on the part of that very considerable and splendid group of men making up the architectural profession. No group of professional men in the history of America has ever been so hard hit as the architectural profession has been since 1930. The courage and resourcefulness of the architects and architectural draftsmen as displayed during the depression is one of the most splendid performances I have ever seen. Situated as we are, in one of the nerve centers of the profession, we have witnessed at close range both the tragic effects of the depression and the heroic manner in which individuals and groups have fought to prevent complete disaster. It doesn't take half as much courage to go over the top with a gun in your hand, knowing that the chances are you will never come back, as it does to meet, year after year, that lack of employment in one's chosen field which brings in its train a series of personal problems difficult or almost impossible of solution. My hat is off, and always will be, to the architects and draftsmen who have made such a magnificent showing!

And now the skies are clearing. We are by no means on easy street but the situation generally is so much better than it was in 1933 that we should all be filled with a spirit of thankfulness that the worst is over and that we are headed in the right direction. We will not at once see the volume of work that prevailed in the years immediately preceding the depression. So far the main recovery is in residential construction. But signs are not lacking to indicate that well before the end of 1937 there will be a healthy resumption of activity in many other types of buildings. Already projects that were put "on ice" in 1930 and 1931 are being dragged out and reconsidered. There will be more of this and the changes that have taken place in our economic and social structure, of which many of us are but slightly aware, will call for new construction of various types in many parts of the country. Designers will be faced with new problems. Proper community growth, rather than individual building operations undertaken without regard to the future of the section in which such projects are being considered, will more and more have to be taken into account. Haphazard real estate development and the ill-considered expenditure of money for unneeded buildings will have to cease. There is a new challenge to the profession of architecture today and I have every confidence that the profession, which has come through so much during the past six years, will give a splendid account of itself in the future.

I want to take this opportunity to thank all members of the Pencil Points Family for the loyal support which they have given to the publication at a time when dollars were scarce and the future seemed anything but clear and bright. That support alone gave us courage to keep on trying to serve you during the lean years when it would have been so easy to say "What's the use?" We are grateful to you all. We, and that means everyone in the shop, extend to you and yours the warmest of Christmas Greetings and wishes for your success and happiness in 1937.

Ralph W. Reinhold

TWO GLASS BUILDINGS

WASHINGTON AND COLUMBUS AGAIN MAKE HISTORY

BY RICHARD KENT

Two large buildings, nearing completion in Washington, D. C., and Columbus, Ohio, are going to attract much attention in their respective communities because of their extensive use of glass brick for exterior walls. These buildings are the new Warehouse for The Hecht Company, designed by Abbott, Merkt & Company of New York, and a factory building for the Capitol Square Corporation, designed by Richards, McCarty & Bulford of Columbus, Ohio. The accompanying illustrations show how both are expected to look. A few typical construction details for the Washington building are given. Wall sections for the Columbus example are essentially similar.

The Hecht Warehouse, located at the junction of New York Avenue, Fenwick Street and Okie Street in the northeast section of the city, is 246 feet by 344 feet for the ground floor with upper floors about 225 feet square. It includes a basement and six stories of reinforced concrete, flat slab construction, designed for warehouse loads.

On the ground floor there is a railroad siding coming into the building for the receipt of merchandise, and the balance of this floor is given over to the delivery of furniture and packages and to motor car repairs. The upper floors will be devoted to the storage of goods and work rooms in connection therewith. The building will be equipped with all the latest and most improved devices for convenience and economy in operation.

The exterior design of the building is striking. It is modern in type, similar to what has been done recently in the Scandinavian coun-

RENDERING BY J. FLOYD YEWELL OF DESIGN BY ABBOTT, MERKT & CO. FOR THE NEW WAREHOUSE FOR THE HECHT COMPANY IN WASHINGTON, D. C.

tries, and consists of horizontal bands of alternating masonry and glass. The exterior material will be terra cotta and enamel brick of buff color with black trim. The horizontal bands of glass, running continuously around the entire four sides of the building, will be principally of glass block with one steel glazed sash in each panel.

Three corners of the building are slightly rounded, and the fourth principal corner has a very decided quarter-circle effect, and this rounded effect on the principal corner is carried up to the roof by a cylindrical tower of glass blocks.

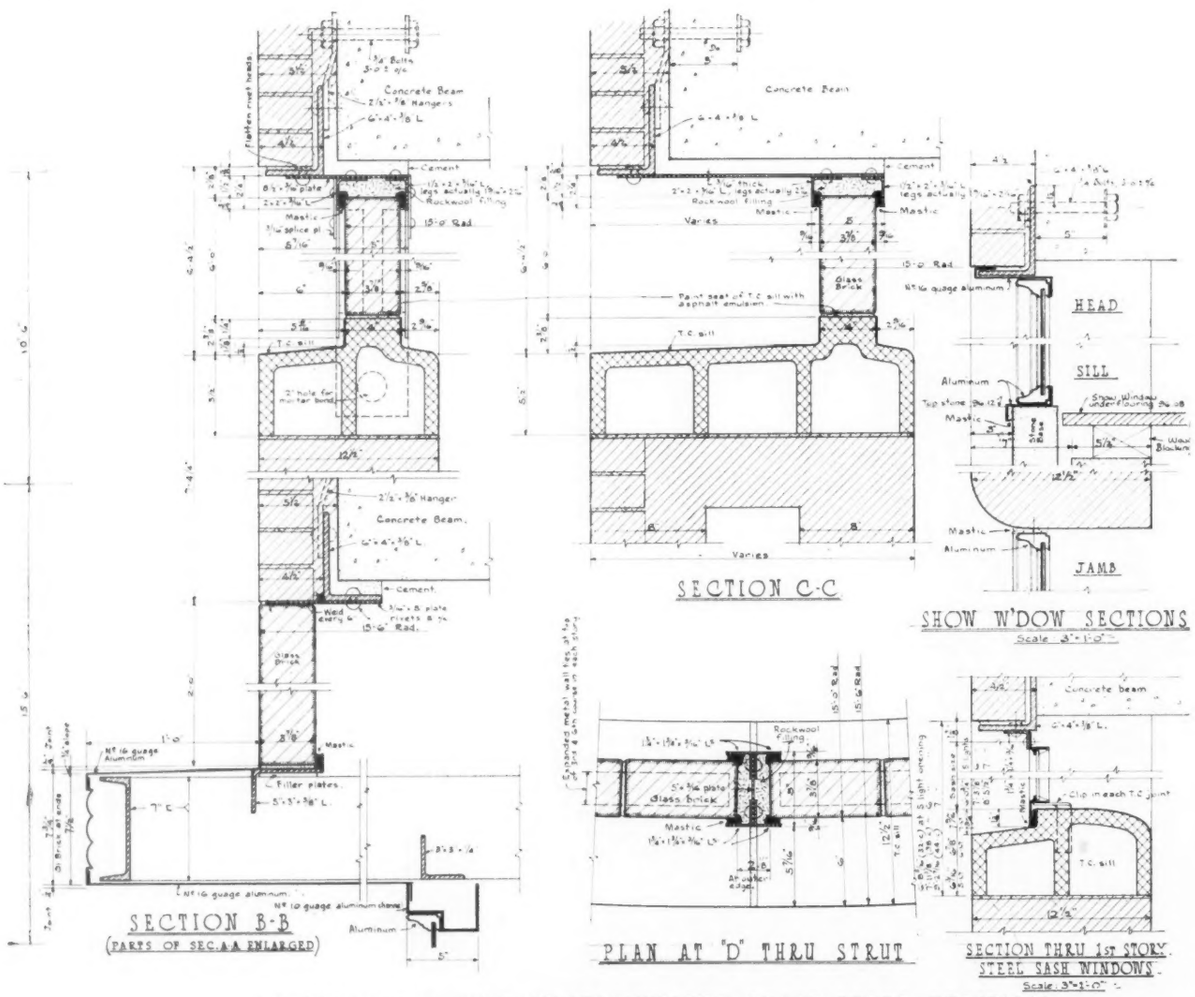
It is anticipated that the color scheme of buff, black, and green glass will be very pleasing by daylight and that illumination of the walls and tower at night will be effective.

It is expected that this building will be completed and ready for occupancy shortly after the first of the year.

The Columbus building is smaller; three stories in height and approximately 148 feet by 188 feet in ground dimensions. It is designed for future extension to 188 feet square with one additional story. The initial structure has been leased to a printing and publishing house.

The object of the designers was to produce a building simple and utilitarian in character but pleasing in appearance, comfortable and attractive to its occupants, and requiring minimum expense for upkeep and operation. The structural frame is reinforced concrete with outside curtain walls of glass brick having spandrels at the floors of Bedford limestone and Kittaning brick. To obtain uninterrupted glass walls, the exterior columns are set back from the face of the exterior wall which is carried on a cantilevered section of the floor slab. Glass brick was chosen for the window area because of its apparent superior appearance, light diffusing quality, insulating value, and economy of maintenance. Economy of

ON THIS AND THE FACING PAGE ARE SHOWN WALL AND WINDOW SECTIONS OF THE HECHT COMPANY BUILDING AS DESIGNED BY ABBOTT, MERKT & CO.



LINTELS, T.C. SILL SECTIONS AND GLASS BRICK FRAMES
(TYPICAL FOR ALL FLOORS)
Scale 3"=1'-0"

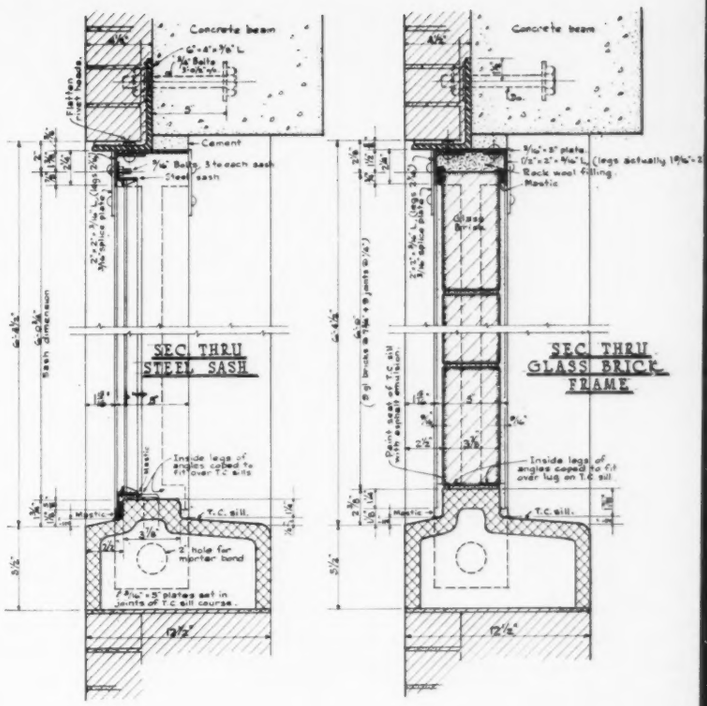
maintenance also determined the use of stone and brick for the spandrels.

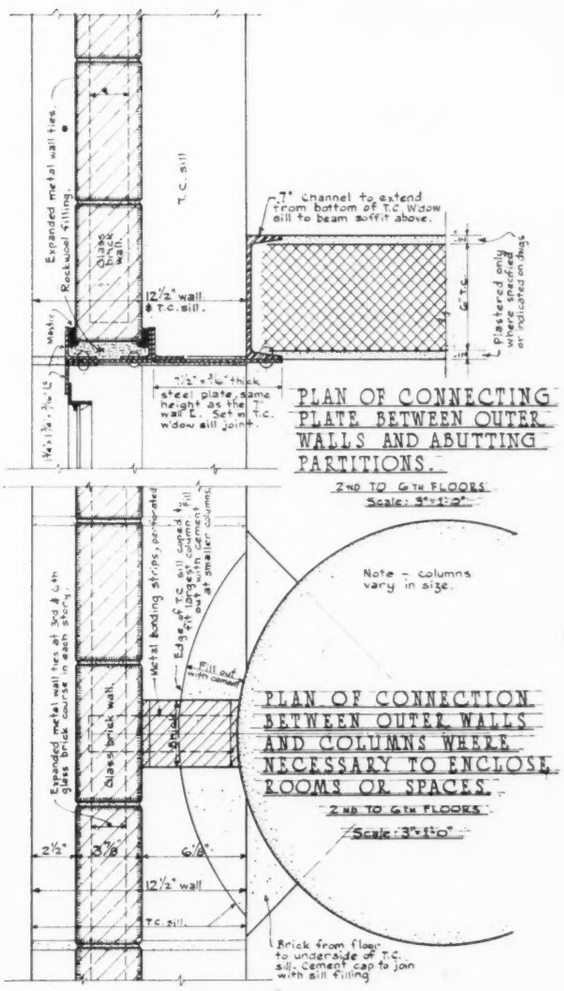
Except in the private offices on the third floor, the structural concrete frame is exposed on the interior and will be finished in enamel paint. Interior masonry walls are brick, faced with salt glazed or enamel brick in manufacturing spaces and common brick in storage spaces. Enameled brick is also used for toilet room walls and for the inside face of the spandrel walls.

The entire third floor will be used for private offices and clerical departments, and is covered with saw-tooth skylights to provide adequate natural light. Glass brick will be used for the interior partitions of the permanent offices for much the same reason that it is being used on the exterior; that is, architectural effect, light diffusion, and ease of maintenance. It is also being used for the glazed area of the skylights. Other interior office partitions will be movable metal partitions.

Floors throughout are of concrete, covered with mastic tile in the office area and wood block in part of the manufacturing space.

Low pressure vacuum vapor heating is used, all large floor areas being heated by unit heaters suspended from the ceilings. Concealed direct radiation is used in the permanent private offices, and exposed direct radiation in others.

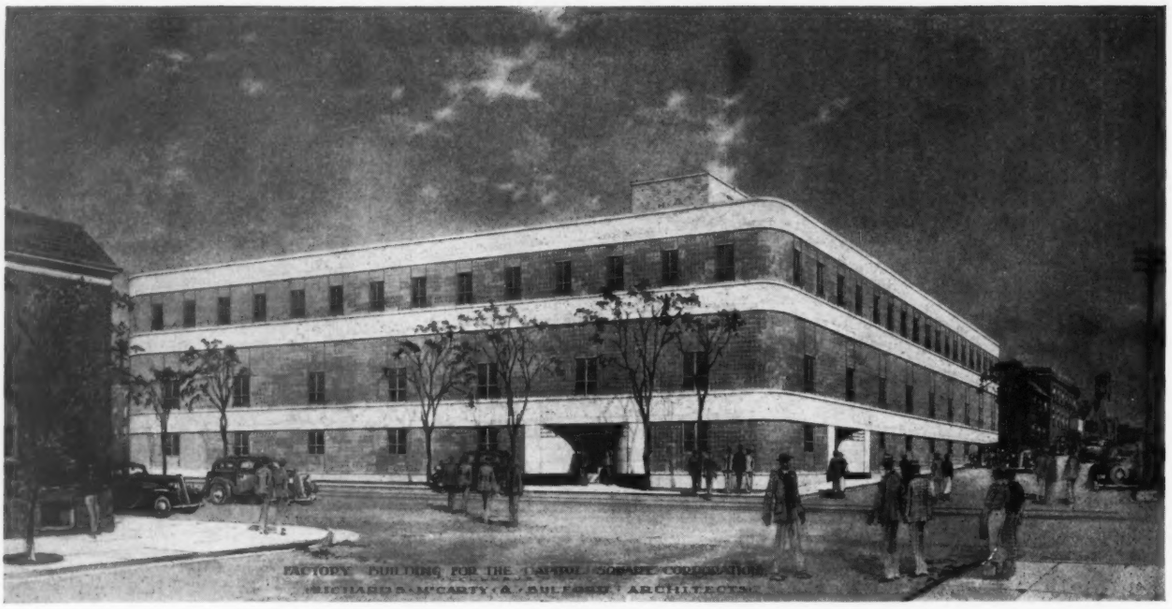



Expanded metal wall ties.
Rockwool filling.
Glass brick wall.
T.C. sill.
12½" wall to T.C. sill.
7" channel to extend from bottom of T.C. window sill to beam soffit above.
Plastered only where specified or indicated on plans.
Steel plate, same height as the T wall L. Set in T.C. window sill joint.
PLAN OF CONNECTING PLATE BETWEEN OUTER WALLS AND ABUTTING PARTITIONS.
2ND TO 6TH FLOORS
Scale: 3"=1'-0"
Metal bonding strips, perforated
Note - columns vary in size.
Expanded metal wall ties at 3rd & 6th glass brick courses in each story.
PLAN OF CONNECTION BETWEEN OUTER WALLS AND COLUMNS WHERE NECESSARY TO ENCLOSE ROOMS OR SPACES.
2ND TO 6TH FLOORS
Scale: 3"=1'-0"
12½" wall
T.C. sill.
Brick from floor to underside of T.C. sill. Cement cap to join with sill filling.

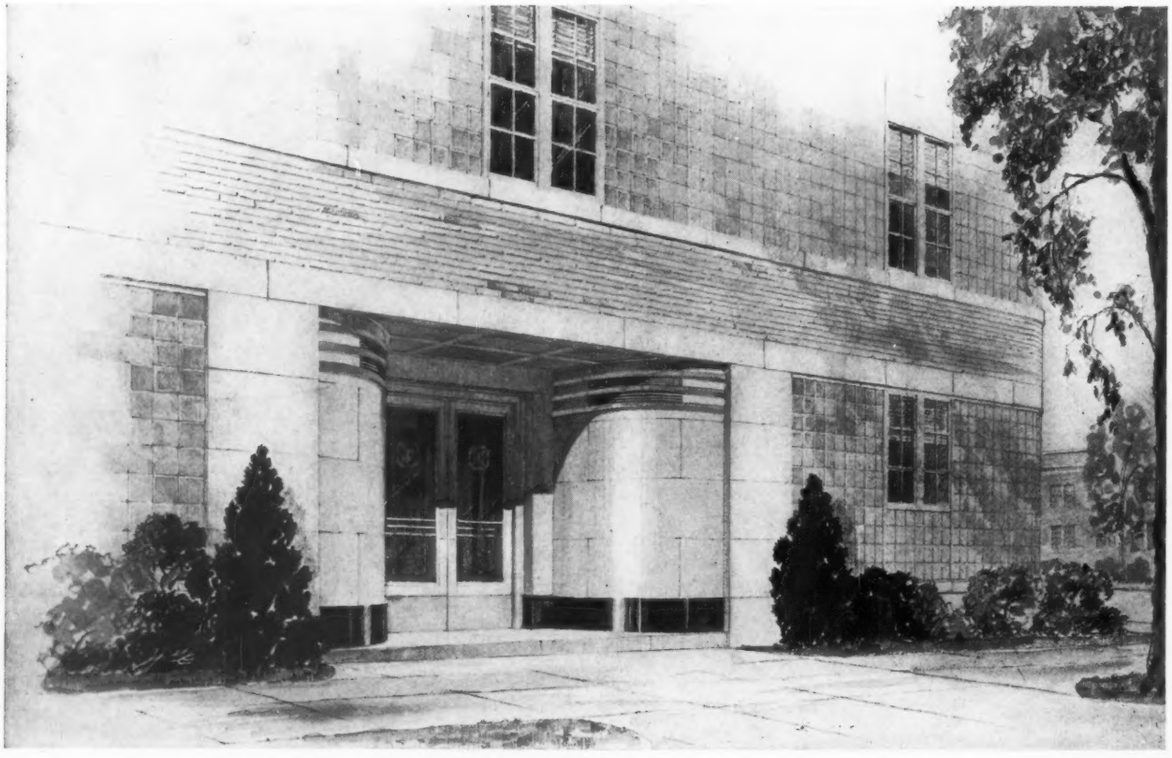
The expense of complete air conditioning and mechanical ventilation of the building being considered prohibitive, steel casement windows have been provided in the glass walls. The psychological effect upon the occupants of being able to see out-of-doors is also considered important. These windows are 100% ventilated and give about as much ventilated area per square foot of glass wall as would be given by the ventilators in standard sidewall sash. The skylights of the third story are ventilated by means of exhaust fans set in the ends of the skylights. Provision has been made to permit the installation of air conditioning apparatus for the third story if it seems desirable at some future time.

The roof construction is of reinforced concrete in the exterior bay around the entire building. Inside of this area where the skylights occur, the roof is a poured gypsum slab supported by steel framing. This construction was adopted to permit removing this framing and moving it up one story in the future. The entire roof area is insulated with one inch of celotex and covered with a standard 20-year tar and gravel roof.

The building is provided with an automatic push button passenger elevator adjacent to the main entrance and a heavy duty elevator near the shipping platform at the other end.



RENDERINGS FROM THE OFFICE OF RICHARDS, McCARTY & BULFORD, ARCHITECTS, SHOWING THE NEW FACTORY BUILDING BUILT WITH GLASS BRICK FOR THE CAPITOL SQUARE CORPORATION IN COLUMBUS, OHIO. BELOW IS A DETAIL OF THE MAIN ENTRANCE. CONSTRUCTION IS QUITE SIMILAR TO THAT OF THE HECHT COMPANY'S NEW WAREHOUSE FOR WHICH DETAILS ARE PRINTED ON THE TWO PRECEDING PAGES



ARCHITECTURE IN EVERY SENSE

BY EUGENE RASKIN

ONCE again I found myself looking across a vast expanse of desk into the steely grey eyes of the Great Architect, and discovering anew their strangely mesmeric quality. And once again I raised to my lips a glass of that unidentifiable red beverage which had affected me so curiously on my last visit. It did not seem quite so bitter this time, but its glow was just as warm through my veins.

"Yes," continued the Great Architect, settling back in his chair, "we are merely beginning. Architecture is still in its infancy. Pay no attention to all these short-sighted, dyspeptic pessimists who tell you that the field of architecture is becoming more and more limited. They yelp about the architect being only a cog in the machine of Big Business Building . . . they whisper ominously about mass housing, prefabrication . . . Pah! I say that architects haven't even begun to learn the full scope of their profession. Why," he emphasized his words with the tip of a forceful forefinger on the desk-top, "they haven't so much as learned the few fundamental elements of their art!"

The Great Architect paused to lift his glass, and with a questioning eyebrow waited for me to follow his example. I did so. Somehow, the feeling descended on me that I was about to hear and learn things of vital importance—that this evening would be one of overwhelming significance.

"Let us see," he went on, "what these fundamental elements are. Architecture is a science insofar as it solves problems relating to function, construction, and comfort. It is an art insofar as it affects us through our senses. Through our senses, I say, because only thus are we equipped to become aware of it.

"This may sound childishly simple to you—but is it? In all the generations of architects that have preceded us, no one—and there were some fairly talented ones—seems to have fully grasped this last point, or realized all of its potentialities. Nor does our own generation understand it properly.

"Stating the matter in its barest terms, it becomes quite clear. There is, first, the sense of sight. We design for this sense by means of form and line, color, light and shadow. Very good. Next, there is the tactile sense—touch. We design for this by means of texture. Polished surfaces, rough ones, hammered ones, fabrics—an endless variety. Some appeal directly to the touch, and some indirectly by way of the eye and association of sensory experiences. Excellent. Third, the auditory sense—the sense of hearing. It took us some centuries to get around to it, but we are at last designing acoustically. The fourth sense, taste, belongs properly to another aesthetic field—the culinary art.

"But how about the fifth sense? Why have we architects not designed especially for it? I mean the olfactory sense—smell."

"Smell?" I giggled weakly.

"Yes, smell." The Great Architect frowned at my disrespectful mirth. Reaching hastily for my glass, I endeavored to cover my embarrassment by draining it at one gulp. After that, the suggestion did not seem quite so ridiculous. Smell? Why not?

A moment's deliberate pause, and the Great Architect continued.

"To make my point clear, I need merely to remind you how important the faint, characteristic odors of certain buildings are, in creating the special, particular moods which we feel upon entering them. For example, the smell of chill masonry mingled with that of extinguished tapers and old woodwork undeniably helps a cathedral to impress on the visitor that sense of awe and mysticism. Undoubtedly, you would not feel that little lift in your spirits when you come into a theatre, if the aroma of rugs, tapestries, programs, and ladies' perfumes were absent. But forgive me for speaking in such an elementary manner. What I mean to bring out is that we, as architects, should deliberately place, control, and arrange these smells in our buildings, so that we may be in fuller command of our art. One of the fundamental elements of architecture has till now operated through chance—but

has, none the less, operated; for it is inescapable. Is it not then the plainest of common sense to study it, learn to manage it—to use it as a tool, rather than just let it happen?"

With an effort, I tried to regain my critical faculties.

"But is it practical?" I queried. "How can one control smells—insert certain odors . . . eliminate others?"

"That is no problem at all." The Great Architect waved a graceful hand. "Already most of our air-conditioned theatres use small vials of perfume which work on the principle of the atomizer. These are placed in the supply ducts, and have proved very satisfactory. In air-conditioned homes and other buildings, the same method can be applied; in fact, individual rooms may be individually odorized to conform with the effect desired. Where there is no air-conditioning, evaporation flasks (similar to certain humidifiers now on the market) may be employed.

"But enough of this theorizing!" He rose and motioned me to follow. "Let me show you my laboratory."

He led me through a door and down a parabolic flight of stairs. (The house was his own design.) Finally we entered what was beyond question the most impressive laboratory I had ever seen. I shall not attempt to describe it, except to say that it might have been dreamt by a Hollywood scenic designer under the influence of a pipeful or two of opium. Following closely at the Great Architect's heels, we passed mysterious arrays of retorts, tubes, dynamos—to come to a halt at last before a rack containing hundreds of vari-shaped bottles, each bearing a label. "Dress Shop," read one. "Art Gallery," said another. "Music Room," a third.

The Great Architect interrupted my examination. "Here you see the results of the first constructive steps that have been taken in realizing the new, broader concept of architecture. These bottles contain the essences which give the characteristic odors of various kinds of rooms or establishments. Those who will follow me," he struck a dramatic pose, "will have the privilege of making further advances. They will go into each type and subdivide it; so that, for example, we may have the correct essence for an Art Gallery of academicians, and for an Art Gallery for moderns. Why don't you sniff one or two?"

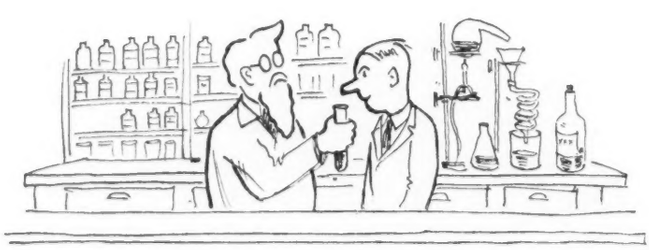
Gingerly I lifted from its berth a bottle labelled "Gentleman's Study." Unscrewing the cap, I raised the bottle to my nostrils. Strangely enough, I could detect no distinguishable aroma; but closing my eyes, I could have sworn that I was surrounded by book-lined walls, leather chairs, an open fireplace, and humidors of good tobacco.

"Master . . . " I stammered, "this is revolutionary! But how did you ever accomplish it? I wasn't aware that you are a brilliant chemist as well as . . ."

"I came to chemistry by a logical process. If you are familiar with my career, as of course you are, you remember that some years ago I was rather active in housing circles, but that I soon dropped out. That was because I was convinced that no progress could be made until a workable unit was found. That task I set myself.

"I experimented first with blocks of houses, then single ones. Next I tried room groupings, but presently broke them down into use-areas. My invention of the Elbow Room Module (3.9 feet) you know." The Great Architect drew himself up with dignity.

"I am now," he continued, "pursuing the atom into the Fourth Dimension."



GALLERY OF MATERIALS

PROCUREMENT DIVISION SETS UP SAMPLE ROOM FOR GOVERNMENT ARCHITECTS

LOCATED on the fifth floor of the Procurement Building, Seventh and D Streets, S. W., Washington, D. C., there is a Building Materials Gallery of a new type.

Here there are assembled, under conditions comparable to those encountered in the construction of Government buildings, representative samples of a variety of constituent materials in their finished forms in such fashion as to afford architects and others charged with the design, decoration, and construction of Government buildings an opportunity to study and determine with facility upon color schemes, types of finishes, combinations of materials, characteristics of competitive materials, and numerous other pertinent questions which arise and require decisions in connection with problems encountered daily in the planning of such buildings.

The gallery constitutes, in reality, a reference library of many building materials available in the United States comparable in purpose to the library usually assembled by architects for study and reference—except that herein are displayed on floors, walls, and ceilings of various rooms, for ready observation, large samples (in many combinations) of the actual living materials that supplement the descriptive matter of books and pictures. It is contemplated that architects and draftsmen of the Procurement Division and of other departmental agencies will resort to this gallery for information which they may require with a view of improving the appearance and architectural interest of Government buildings. Architects in general practice and the general public may visit it during regular office hours.

The gallery was sponsored by the Procurement Division in the interest of better and more appropriate Government buildings. Participation of the Procurement Division, however, was limited to the allocation of approximately four thousand square feet of floor space to be utilized by participating industries under specific conditions and regulations.

In the allocation of space among material industries, the Procurement Division stipulated that there be no reference made to any manufacturer; that the materials must be completely representative of the entire industry and the cost thereof to be borne by such industry; that each material or combination of materials must be treated in an architectural manner; and that only products valuable in architectural selection be shown.

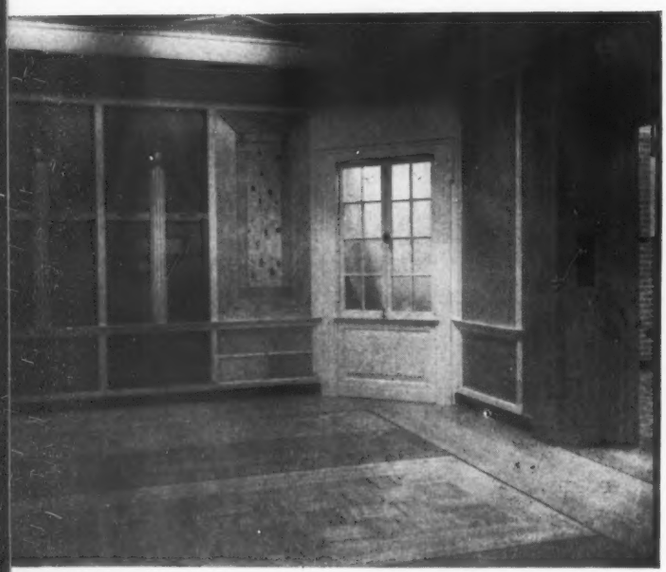
On account of the limited available area, the allocation of space was necessarily restricted to those industries furnishing products considered to offer most needed information of the character required by the Procurement Division. The number of participating industries is twenty-one.

The available area was divided into eleven rooms, three of which have outside exposure. These rooms were allocated among the participating industries either singly or in groups, depending upon the characteristics of the industries and their abilities to produce architecturally satisfactory rooms independently or better in conjunction with other industries. Generally speaking, even where a room was allocated to a single industry, that industry has procured the cooperation of one or more others.

Designations of the rooms and general classification by industries embrace:—

a. Clay products industries, 4 rooms; the terra-cotta, the tile, the face brick, and the glazed brick rooms.
b. Stone industries, 2 rooms; the exterior stone and interior marble rooms.
c. Metal industries, 3 rooms; the metal window, the stainless steel, and the aluminum rooms.
d. Structural glass industry, 1 room; the structural glass room.
e. Wood industries, 1 room; the wood room.

All rooms are shown hereafter except the metal window and structural glass rooms.



Rooms in Detail

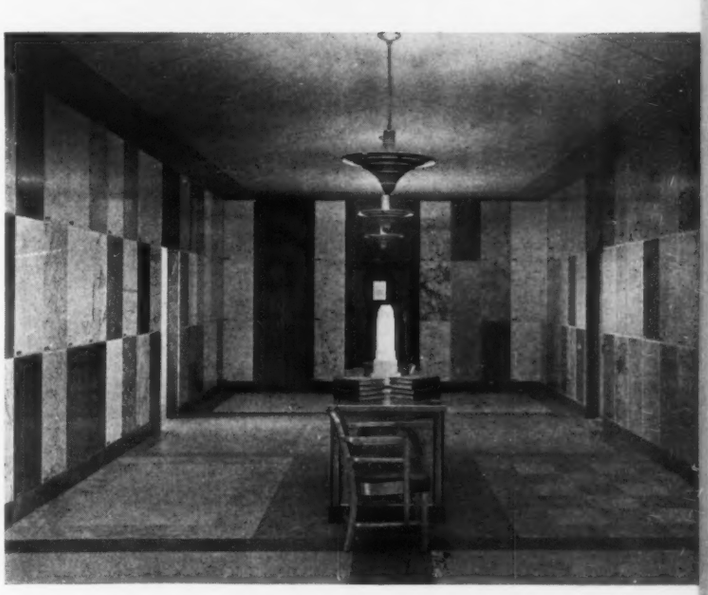
The aluminum room is the work of the aluminum industry with the marble and plastic industries cooperating. *Floor,* gray marble with black marble border and central panel into which are set aluminum dividing strips. *Wall base,* black marble. *Walls,* brown marble except one corner in white marble. Into the walls are set numerous items of aluminum embracing a double-hung window frame with sash equipped with aluminum Venetian blinds, a casement window, a heavy outside entrance door with accessories, radiator grille and ventilating grilles, fluted pilasters, a decorative panel in relief. Upon the wall are hung six plaques of the same subject, but finished in six different ways, illustrative of the range of treatment available for a single subject. Other items illustrative of the uses of aluminum are gutters and downspouts, a mail chute, an office building letter box and wall type lighting fixtures. Recessed into the walls are set two rich red display cabinets suitable for book cases or other shelving needs of plastic composition material. *Ceiling* is of plastic composition material done in two colors laid to an octagonal pattern and set off by aluminum dividing strips and cornice. *Lighting,* direct from flush type aluminum ceiling fixture, direct from concealed continuous fixtures through light panel of ceiling finish and direct from closely set wall type fixtures. A large table with black plastic composition top, trimmed with aluminum and setting on a dark marble base features the center of the room. Aluminum mesh curtains embellish the principal window opening.

The exterior stone room is the work of the granite, marble, limestone, sandstone, slate, soapstone, greenstone and cast stone industries. *Floor* in two portions—one, seven panels of different colors of cast stone separated by black stripes of the same material; the other, two panels of slate in different finishes and in variegated colors—all surrounded by a slate border. *Wall base,* green-black marble. *Walls*—panels, generally 18″ x 36″, cut from commercially producible stones suitable for exteriors of buildings held in place by narrow aluminum separating strips. The panels present all colors in which the materials are obtainable from white through the full range of colors to black and illustrate the various finishes applicable to these stone for exterior uses. Many of the panels are given two or more types of finish and reveal the extent to which different color effects are procured through selection of surface finish. The center of the room is occupied by a low partition wall upon which are mounted in upright position panels of other stone for which wall space was not available. The total number of pieces shown is one hundred ninety-two. *Ceiling* of this room is acoustical tile. *Lighting fixtures,* indirect aluminum.

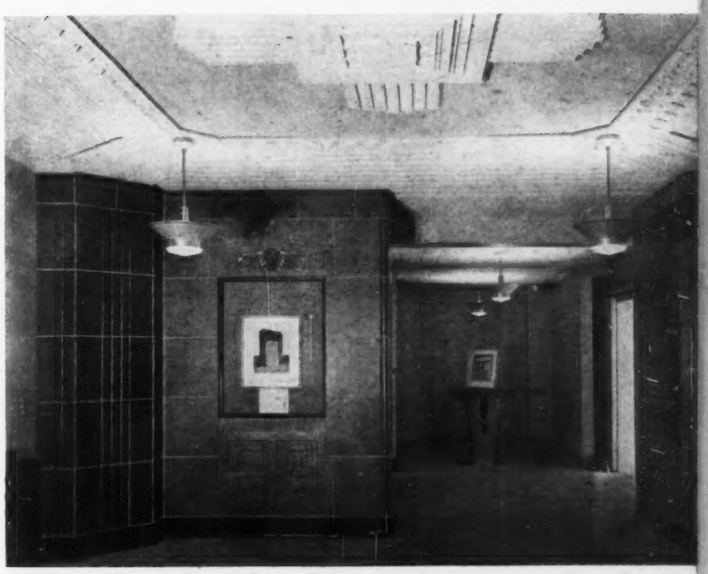
The wood room is the work of the lumber industries. *Floor,* fourteen panels of different kinds of woods laid in various patterns all surrounded by a border of light colored wood. *Walls,* thirty-two panels of various rectangular sizes and of different kinds of wood all presented so as to bring out the natural grains and colors of the woods in plain, carved and decorated finishes. These wall panels are removable and interchange may be made with other panels for which wall space was not available and which are kept in an adjacent storage room ready to be placed in the walls as occasion demands. *Ceiling,* six panels of different woods in natural finishes. *Lighting,* concealed direct. Two corners of the room are developed to demonstrate double-hung and casement windows, respectively.

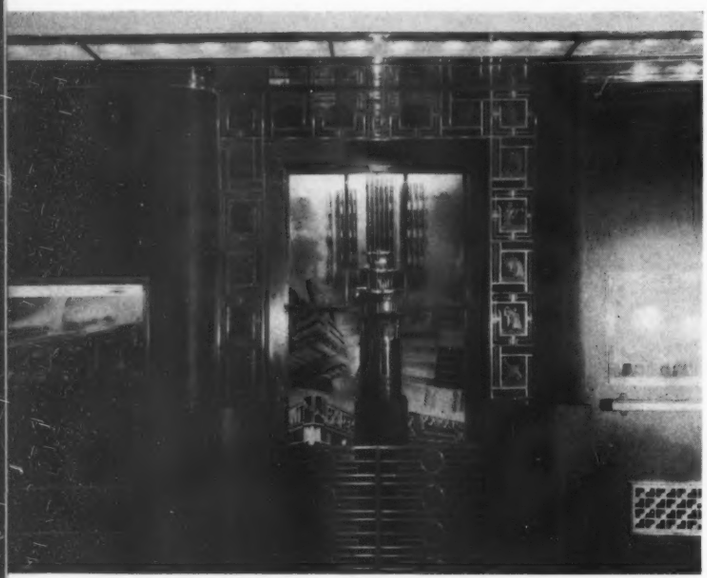
THE TILE ROOM is the work of the tile manufacturing, acoustical tile and nickel alloy industries. *Floor,* nineteen separate blocks of floor tile in various colors and patterns. *Wall base,* fourteen colors of glazed wall tile harmonizing with fourteen colors and patterns of tile wainscot with appropriate top moulds. Five windows along a false interior wall are treated upon one face with three different tile trims and upon the opposite face with two different combinations of wood and tile trims. *Ceiling,* acoustical tile. In the center of the room, a tile fountain done in vari-colored green tile around an idyllic central figure of a child. A mosaic, done in small tile, adorns one wall into which is incorporated an iron watchman's station box with such skill that the utilitarian feature is so masked as to appear to be almost a part of the motif. In another wall are featured three panels of tile wall finish in distinctly different colors. Upon the walls hang decorative plaques—one being a reproduction of the exterior faience of the American embassy in Tokyo, and three others presenting likenesses of George Washington, Abraham Lincoln, and Franklin Delano Roosevelt. *Lighting fixtures,* deep bowl, semi-indirect type of nickel alloy. Within the room are filing cases in which are placed, and available for examination, samples of tile in all available combinations of color and pattern.

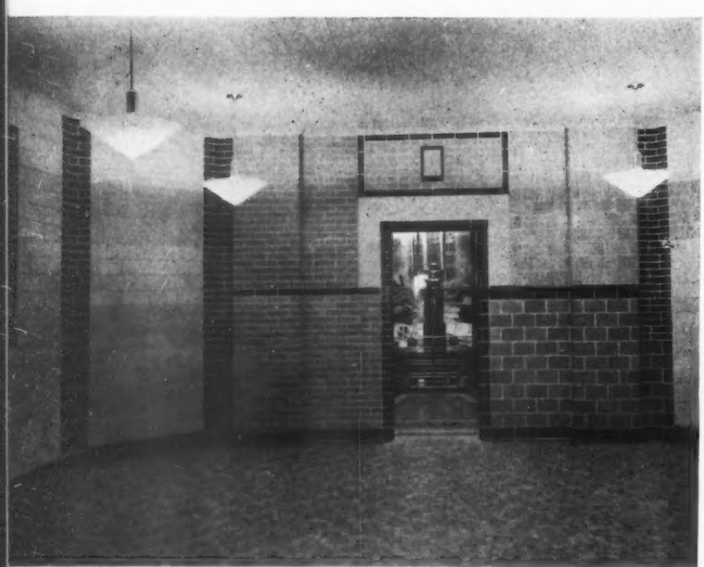
THE INTERIOR MARBLE ROOM is the work of the marble industry. *Floor,* ten panels of marble in various colors and combinations and each panel with an appropriate marble border. *Wall base,* green-black marble. *Walls,* one hundred ninety-two panels of commercially obtainable marble suitable for interior usage; generally 18″ by 36″ in size, and held in place by narrow aluminum dividing strips. *Ceiling,* acoustical tile. *Lighting fixtures,* indirect aluminum. In the middle of the room, a cabinet in which are small-sized samples, convenier for handling, of all specimens mounted upon the walls and in addition similar samples of all other rarer marbles obtained within the territorial limits of the United States and its possessions but in quantities too limited to permit their utilization in general building operations. Upon this cabinet is featured a lamp done in white marble and fashioned as a miniature model of a widely known tower building.



THE TERRA-COTTA ROOM, including also the entrance vestibule, is the work of the terra-cotta, acoustical tile and plaster, acoustical stone, and the nickel alloys industries. *Floor,* random range red quarry tile. *Wall base,* generally black tile with some orange. *Walls,* hand made and machine made terra-cotta in eleven colors ranging from cream to dark blue, relieved in parts by black polychrome chair rails, set in various patterns and embracing a typical section of a swimming pool design. *Ceiling moulds* of various contours and colors ranging from an unmoulded corner through tan mottled simple mould to a deep polychrome frieze. *Ceiling,* in the main room is acoustical stone in a modernistic design and in the vestibule is plain acoustical tile. Blue-black-green pilasters feature two corners of the room. A massive entrance doorway in black flanged by black wainscot features one wall. Nickel silver features embrace an intricate grille in the passage arch between the vestibule and the room, an interesting information desk in the center of the room and a door set in a simple tile trimmed opening. In the vestibule, a monel metal lobby desk with black structural glass top. *Lighting fixtures,* semi-indirect units of aluminum.







THE STAINLESS STEEL ROOM is the work of the stainless steel industry with which the cork, terrazzo and structural glass industries cooperated. *Floor,* terrazzo in modernistic design featuring reds, browns, and greens with stainless steel dividing strips and tan cork border. A large eagle, of conventional design executed in the metal, features one floor panel. *Walls* from floor to ceiling, and the ceiling, are black and arched stainless steel, respectively, except cork walls in a decorative niche. *Wall trim,* grilles set in the walls, and trim for glass covered openings to show cases for specimen products are of the same material with polished finish. At one end of the room a section of wall is done with black wainscot and door trim set off by a brilliant red structural glass sidewall all built around a cast stainless steel elevator door depicting six groups of conventionalized human figures symbolical of industrial operations. Another section of wall features an interior building partition laid up of glass wall units each approximating a brick in size, through which light may pass but through which the vision cannot penetrate. *Lighting,* fully concealed direct from ceiling with indirect from stainless steel continuous suspended fixture.

THE GLAZED BRICK ROOM is the work of the glazed brick and tile industries. *Floor,* random range fire flashed tan and brown tile laid in an overall pattern. *Wall base,* seven colors of glazed brick and tile and in various forms of contour. *Walls* are panels and units of glazed brick and tile in nearly seventy colors, combinations and designs. *Doors,* trim in five different designs and combinations. *Ceiling,* perforated acoustical tile. *Lighting fixtures,* semi-indirect glass.

THE FACE BRICK ROOM is the work of the face brick manufacturing industry. *Floor,* red pressed brick laid in two patterns with a border of the same material laid in an appropriate design. Four *walls* laid up with bricks of different types and texture, all predominantly buff, one wall simulating an entrance to a post office with fluted brick pilasters surmounted by conventional eagles done in white marble. In two corners of the room, projections into the room illustrative of exterior corners of buildings are built of different colors of red brick, laid up in different types of bond. *Ceiling,* perforated acoustical tile. *Lighting fixtures,* semi-indirect aluminum. Within the room, steel cabinets contain specimens of bricks of all available types and colors laid up in sample forms to illustrate the full ranges of color and design in which face brick may be obtained and utilized.

The group of eleven rooms is not considered to be a complete exposition of materials available to the building industry. They reveal, however, the possibilities for service to the building industry that such a development can render. Space limitations and the experimental nature of the present venture restricted its scope. Should the value of the display gallery manifest itself to a sufficient degree, a comprehensive extension may be added.

The producers' associations representing the industries which are participating in this reference library are: Acoustical Industry, Aluminum Industries, Cast Stone Industry, Cork Industry, Glazed Brick and Tile Institute, Granite Industry, Limestone Industry, Metal Window Institute, National Association of Marble Producers, National Lumber Manufacturers' Association, National Terrazzo and Mosaic Association, Nickel Industries, Plastic Industries, Slate Industry, Soap Stone Industry, Stainless Steel Industries, Structural Clay Products Industry, Structural Glass Industry, Terra Cotta Industry, Tile Industry, Window Glass Institute.

AN ANALYSIS OF ORDER

BY RALPH WALKER, F. A. I. A.

ORDER has an æsthetic quality.

The architect makes a few regulating lines on paper, perhaps an axis and a cross axis, and then explains that thereby he achieves order; or by the limiting use of plane geometrical formulæ or of two dimensional moduli he restricts the free use of form and again explains that these are a guarantee against wilfulness.

Order must have some laws.

But it would seem that architecture is fundamentally no different from other human endeavors. If it obeys laws they are probably of the same quality as those governing music, painting, or sculpture. Surely the laws of most importance in each case, and the most difficult to define and limit, are those of sensation.

Perhaps the only important knowledge, other than that of skill, for the artist to attain is to understand thoroughly the psychology of appreciation.

Order may mean one thing to the pioneer and another to the sophisticate, nor should one or the other be sneered at. There was throughout the latter part of the Victorian period a tendency to confuse order with morals. Thus the early Renaissance was pure while the Baroque was decadent. We are inclined to weigh the values of our modern attempts in much the same manner and the word "clean" connected with architecture has developed a meaning more than godly.

The most harmful thing about any order is that adherence to it becomes the basis of fanaticism. No architect can ever achieve order unless he realizes that actual order requires a cultural appreciation, a knowledge of people and an understanding of human needs and desires.

It is not enough to say with LeCorbusier that regulating lines are—

1—"An inevitable element of architecture."

2—"The necessity for order, the regulating line is a guarantee against wilfulness. It brings satisfaction to the understanding."

3—"The regulating line is a means to an end. Its choice and modalities of expression given to it are an integral part of architectural creation."

Architectural creation achieves order only through the ability to intellectualize the sensations of the tenant, in that it is different from building order which needs to meet physical requirements only.

Balance in architecture must not be quantitative in extent nor of mathematical regularity. In most cases the more mathematical the solution the more lifeless the sensation. The mere fact that mechanical things are made to work does not prove their forms to be worthy of emulation. The most efficient aeroplane has still much to learn from the natural abilities of birds. Who, having seen a great owl rise off the ground silently, vertically, and rapidly, can fail, with all due admiration for man's accomplishments, to contrast it with the clumsy efforts of the very best pilot in the most up-to-date plane.

It is obvious that the truly efficient bird acknowledges one order in its flight qualities and another in its protective coloration, and still another in its need for family unity and recognition.

No statement of order can ever be fully complete.

The ancient Greeks, toward whom all look when regulating lines are mentioned, had the supreme sophisticated sense of using their limited knowledge of mathematics when desirable and again disregarding it when it got in the path of sensation. It might be said that their refinements are not great solutions as far as mathematics is concerned, but they are truly magnificent attainments in the comprehension of human sensibilities.

The Greeks never made the mistake the so-called logical French have so long continued as a basis of architectural philosophy—that plan order can only be arrived at by symmetry. In fact they knew well the limitations of symmetry, as did the Romans, and that while they both appreciated the beauties of

symmetry they realized that these beauties could not be extended indefinitely.

Plan order may be apparent in the L'Enfant plan of Washington or in the Burnham plan for Chicago, but only so long as they are maps held under the immediate focus of two eyes.

Order which is thus apparent on a piece of paper may be chaotic in so far as living is concerned. A close study of the plan of Chicago, for example, reveals a great symmetrical pattern of highways and parks superimposed upon badly planned communities. A great picture of order takes the place of actual order.

The great difficulty with all such conceptions of order is that externals control life.

The magnificent thing about the plan of Chicago is not the great pictures with their underlying bad planning and thinking, but the recovery of the waterfront—in America almost always a blighted and ugly area—which here is changing into a result of great civic beauty. It is generally treated with understanding of local conditions and scale except in front of the main axis of the great picture at Grant Park where a gargantuan egotism of scale drawfs humanity and defeats itself.

Another and different type of the misunderstanding of order is seen in the city plans of LeCorbusier. These plans are always conceived as the *great city* and they remake the sprawled out confusion of age-old growth with the attendant lack of control and achieve regulation, the controlled disciplinary order of social dictation.

It is not that they become better physical places to live in—that can be granted—but they are even more rigid in the way they condition life than is the chaos they are intended to supersede. They are in line with the mass thinking which is part of our post-war heritage; that thinking which presupposes a daily life supplied and controlled by others.

They are based on the assumption that the machine means congestion, which is an entire negation of the possibilities of order in an era of speed. Every indication of the future, under the machine, is toward dispersion.

Who has understanding of tomorrow's order? LeCorbusier, who would house the world in barrack cells isolated and conditioned against nature, or Henry Ford, who is saying that cheap transportation, easy communication, accessible power mean a closer and more friendly relation between country and city? And Sir Raymond Unwin, who thinks of man not as a warehouse problem but as someone best housed in a single family dwelling related to a usable plot of land.

It can be immediately appreciated that here are two different ideas of order and under them two different kinds of people will grow up.

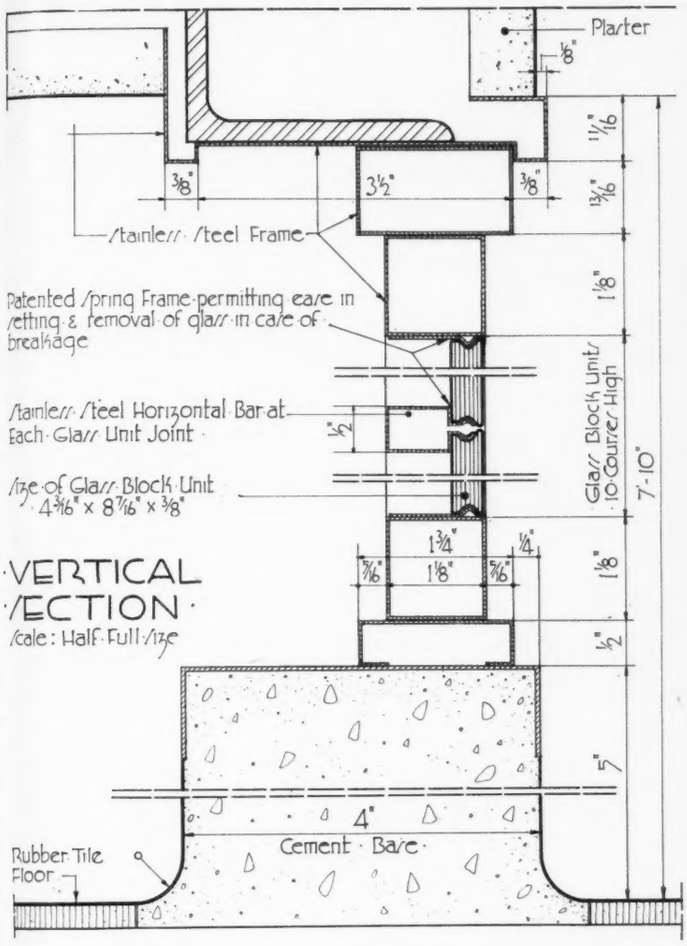
It is not the regulating line which is a guarantee against wilfulness, but it is a nationally self-imposed discipline which can be the only guarantee against wilfulness. In other words, the national will-to-do curbed by a mutual responsibility. When that is obtained there grows naturally an orderly society and then an orderly architecture.

It is only from such a basic feeling and desire for order that creation can exist and continue.

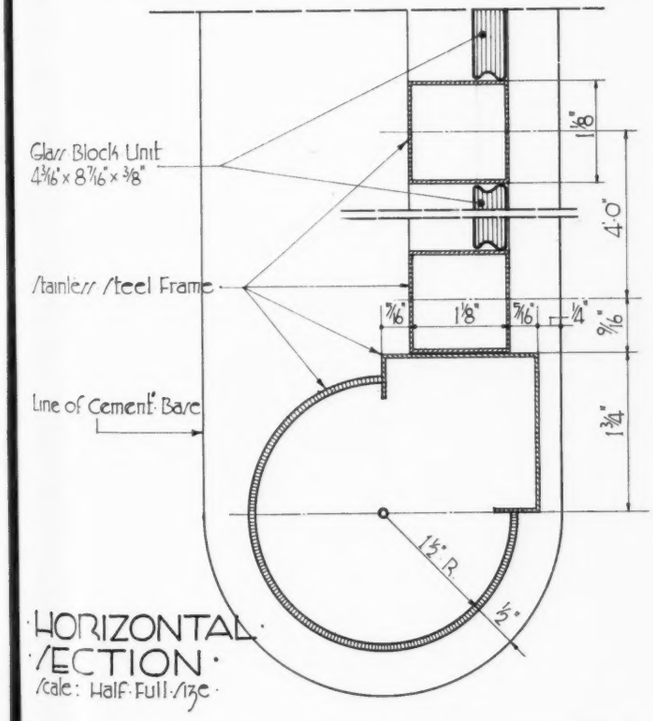
Without fear of being considered old-fashioned, I can state that the excellence of the communities and architecture of the eighteenth century in New England came not from a superior knowledge of architecture, but through the strong character and logical sense of order which persisted for so many years through that century.

* * * * *

It would seem obvious that order in architecture derives from the plan, but it does not seem so obvious to most architects that this plan is not something composed on paper. It is a generator of architecture only in so far as it realizes the life lived within. A group of the designs in the New York Fair Competition, illustrated in this issue, are worthy of study—careful study—not because you might have a Fair building to design but because it is evident that thinking about and knowing something of the nature of a problem is very necessary to do a living job. The prizes are as open to criticism as were the two hundred or more designs that gave no evidence of any thinking whatever. Design order is not some magical hocus-pocus but needs brains to make, first, a clear statement of the problem, so that form may naturally develop.

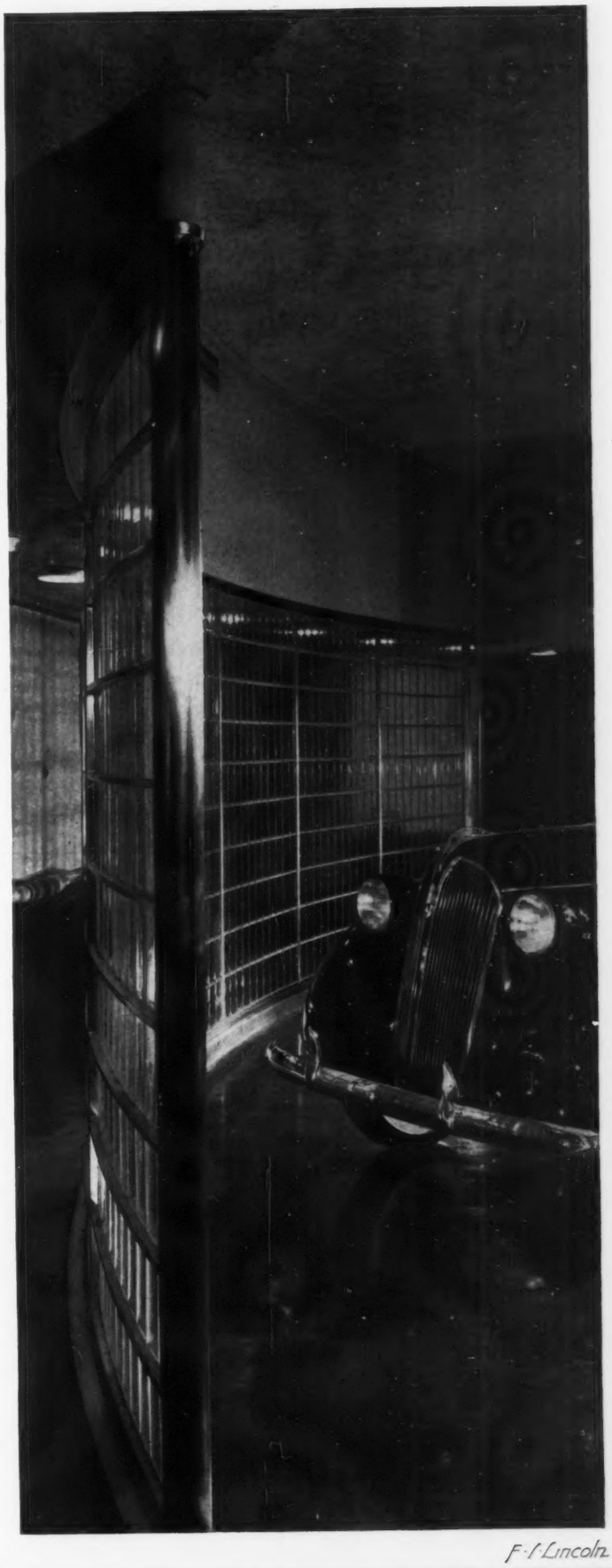


VERTICAL SECTION
Scale: Half Full Size

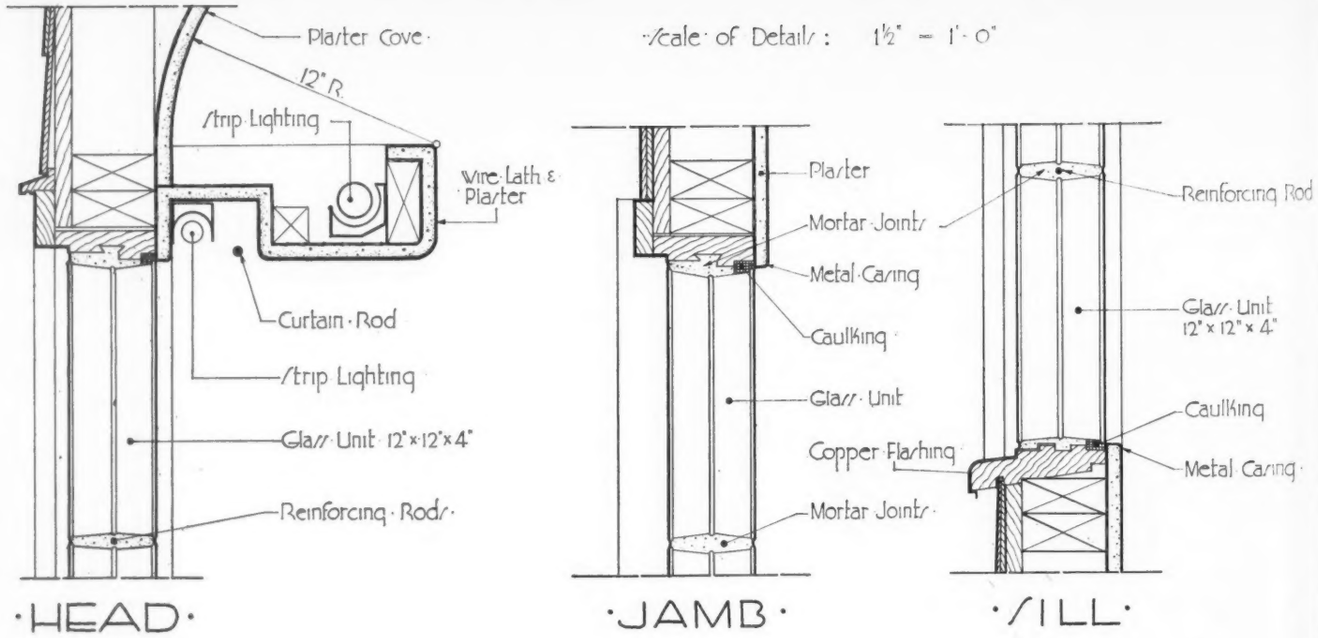


HORIZONTAL SECTION
Scale: Half Full Size

REINHARD & HOFMEISTER
Architects

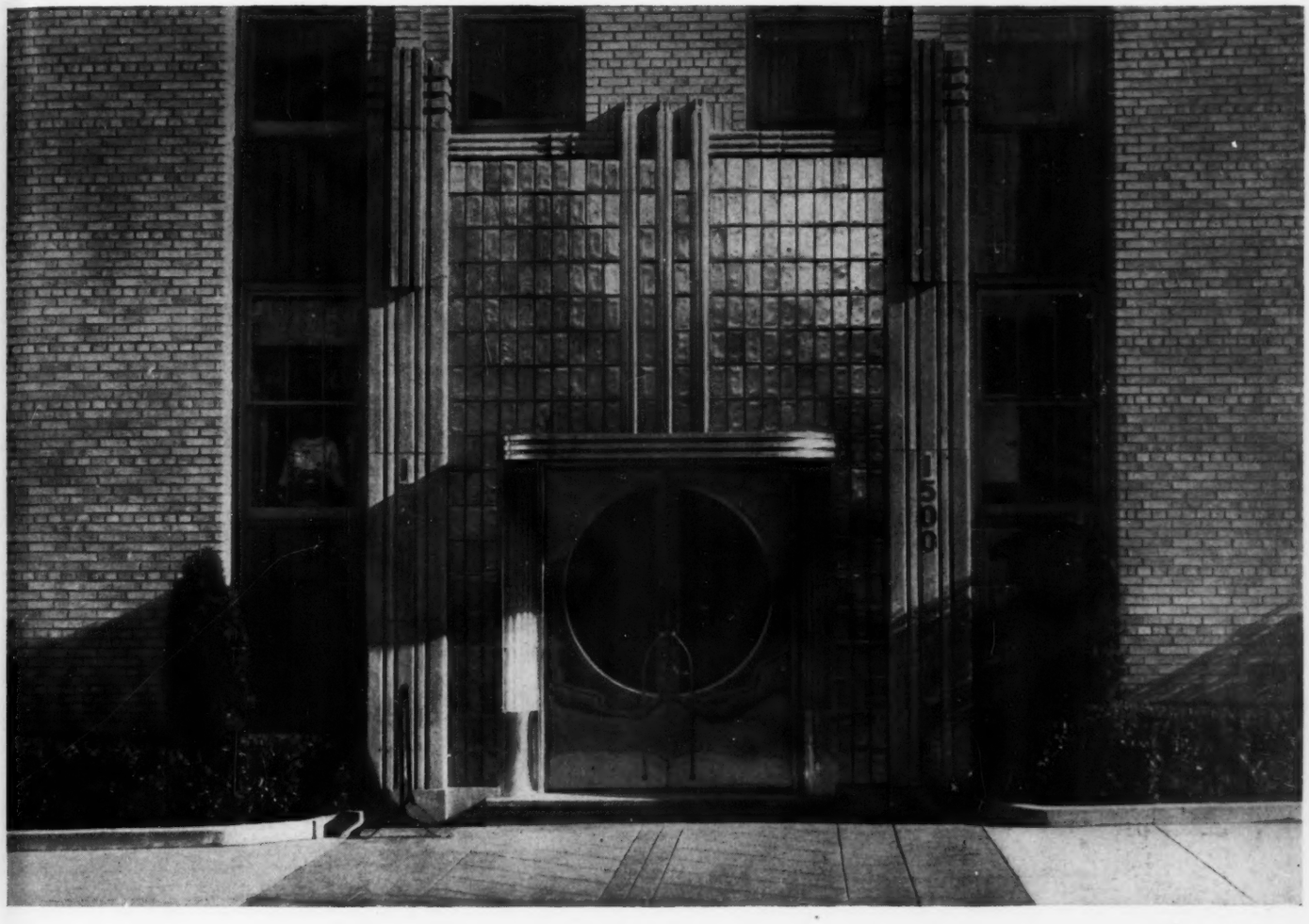


F. I. Lincoln

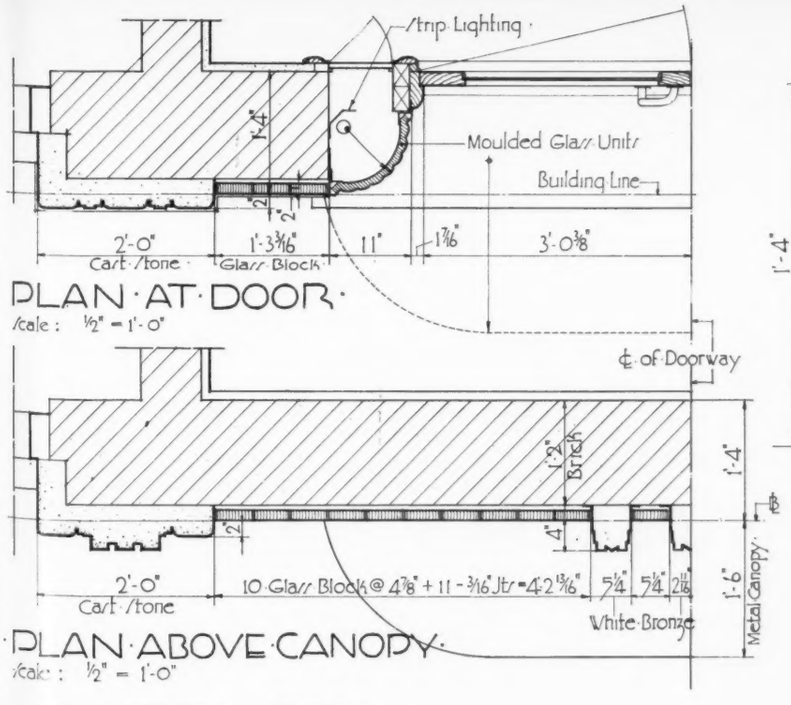


·HEAD· ·JAMB· ·SILL·

·BAVNES · & · LLOYD·
·Designers

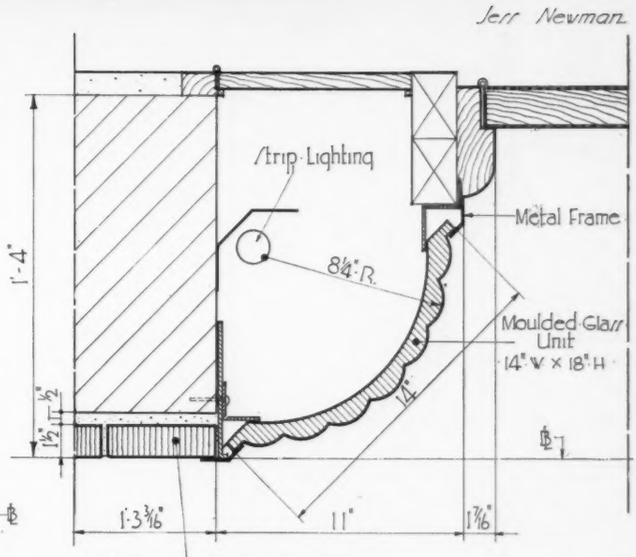


Jess Newman



PLAN AT DOOR
Scale: ½" = 1'-0"

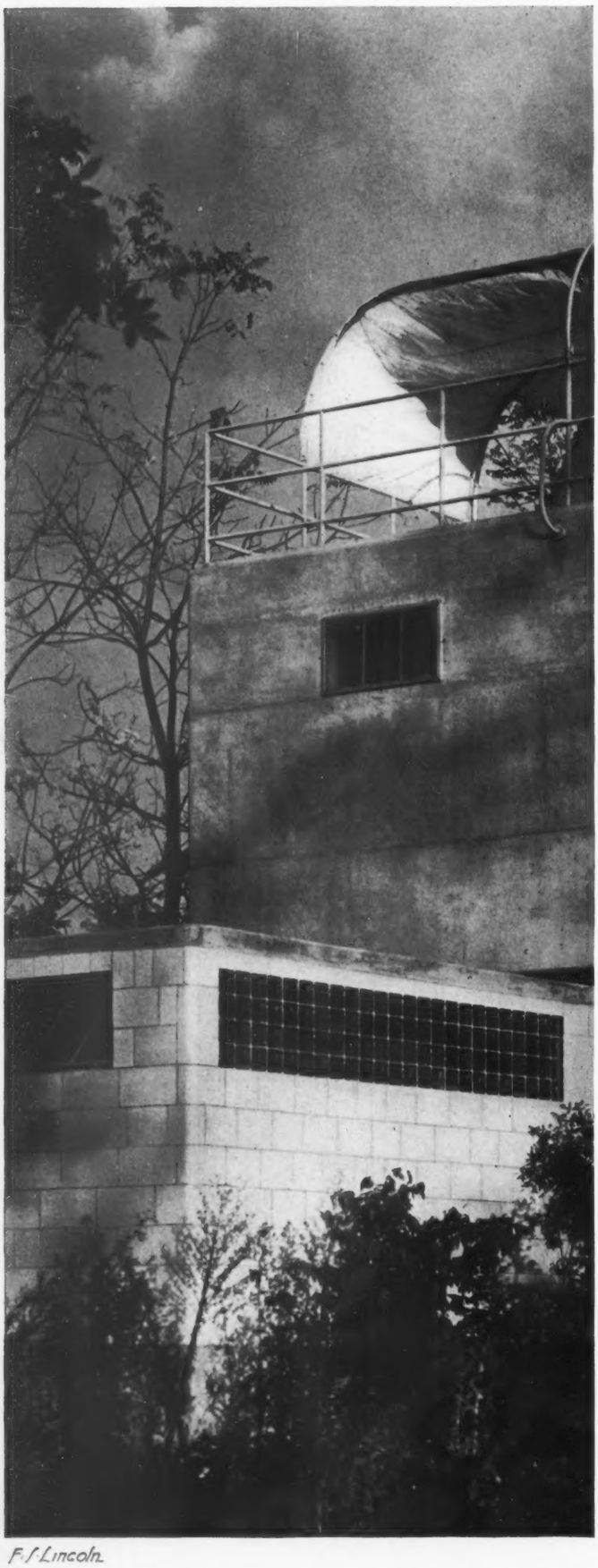
PLAN ABOVE CANOPY
Scale: ½" = 1'-0"



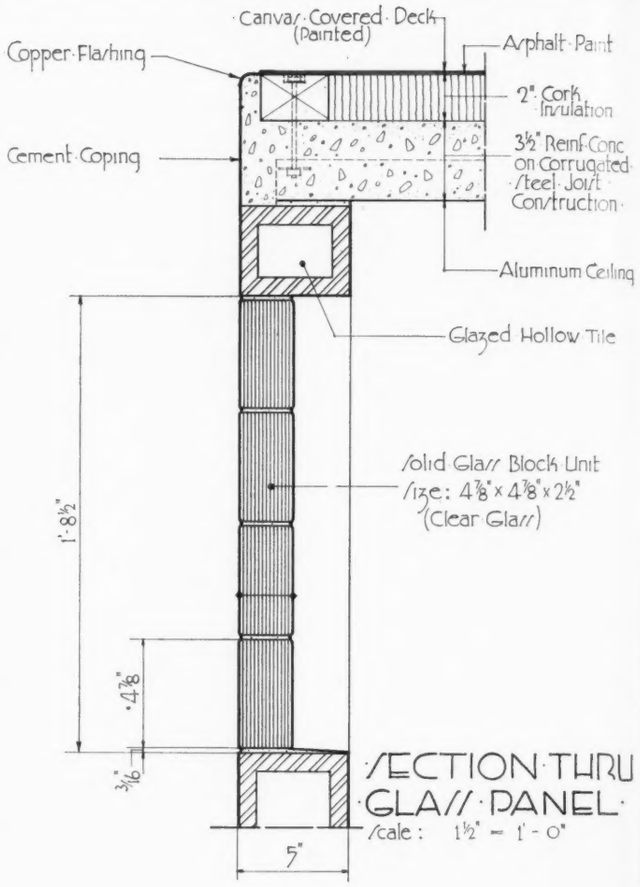
Solid Glass Block - Mirrored Back
Size: 4 7/8" x 9 7/8" x 1½"

DETAIL OF GLASS AT JAMB
Scale: 1½" = 1'-0"

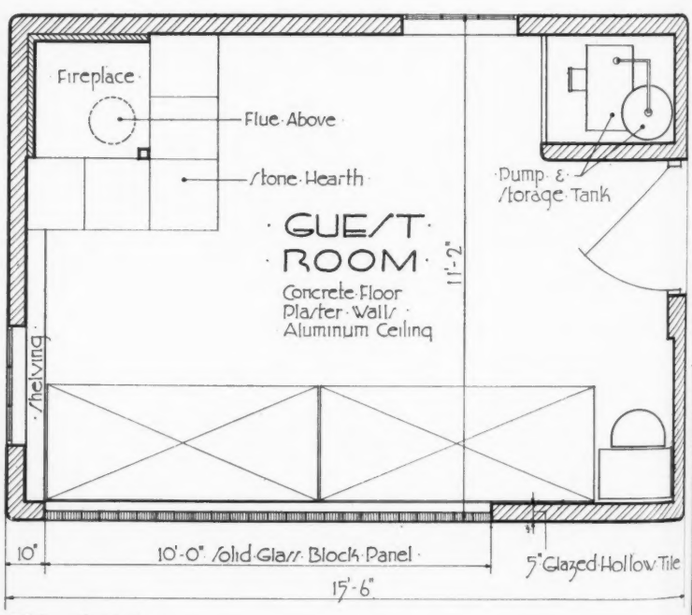
J. M. FELSON
Architect



F. S. Lincoln

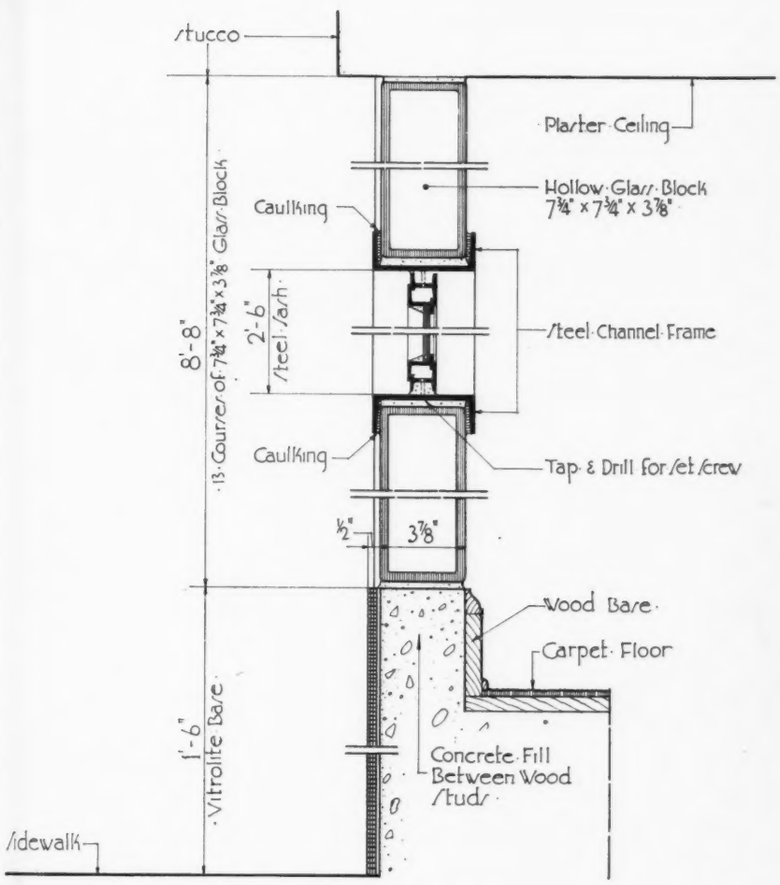


SECTION THRU GLASS PANEL
Scale: 1½" = 1'-0"

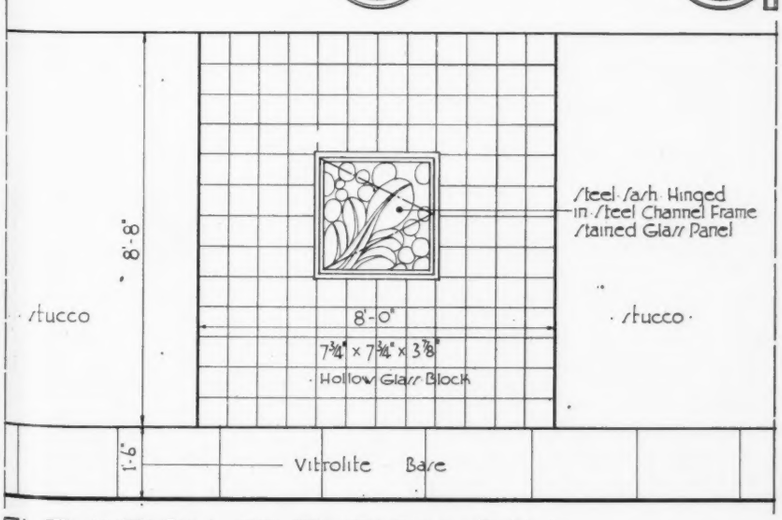


PLAN
Scale: ¼" = 1'-0"

A. LAWRENCE KOCHER
ALBERT FREY
Architects

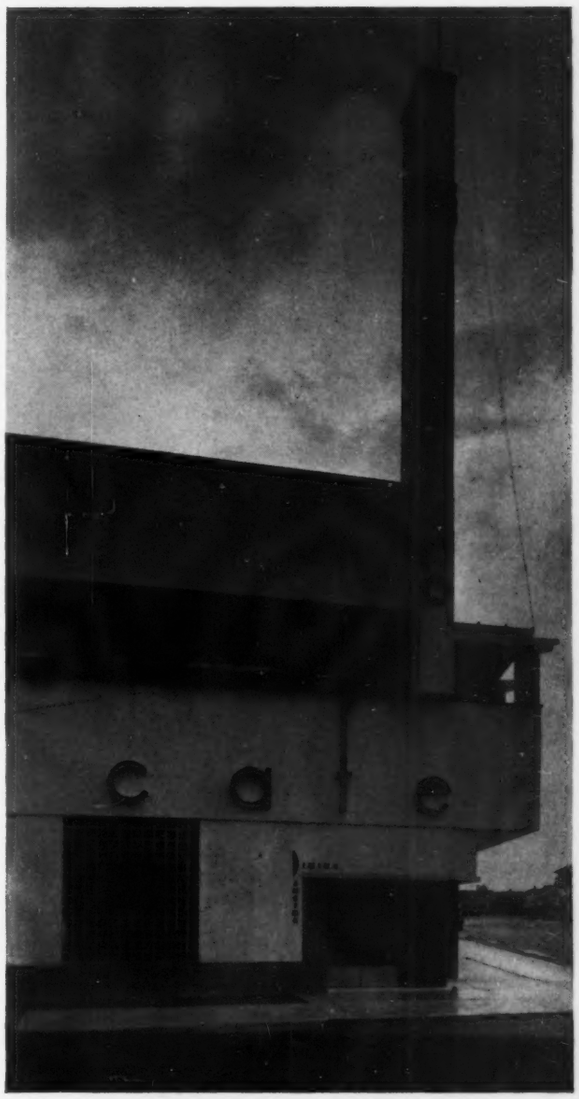


SECTION THROUGH GLASS PANEL
Scale: 1½" = 1'-0"

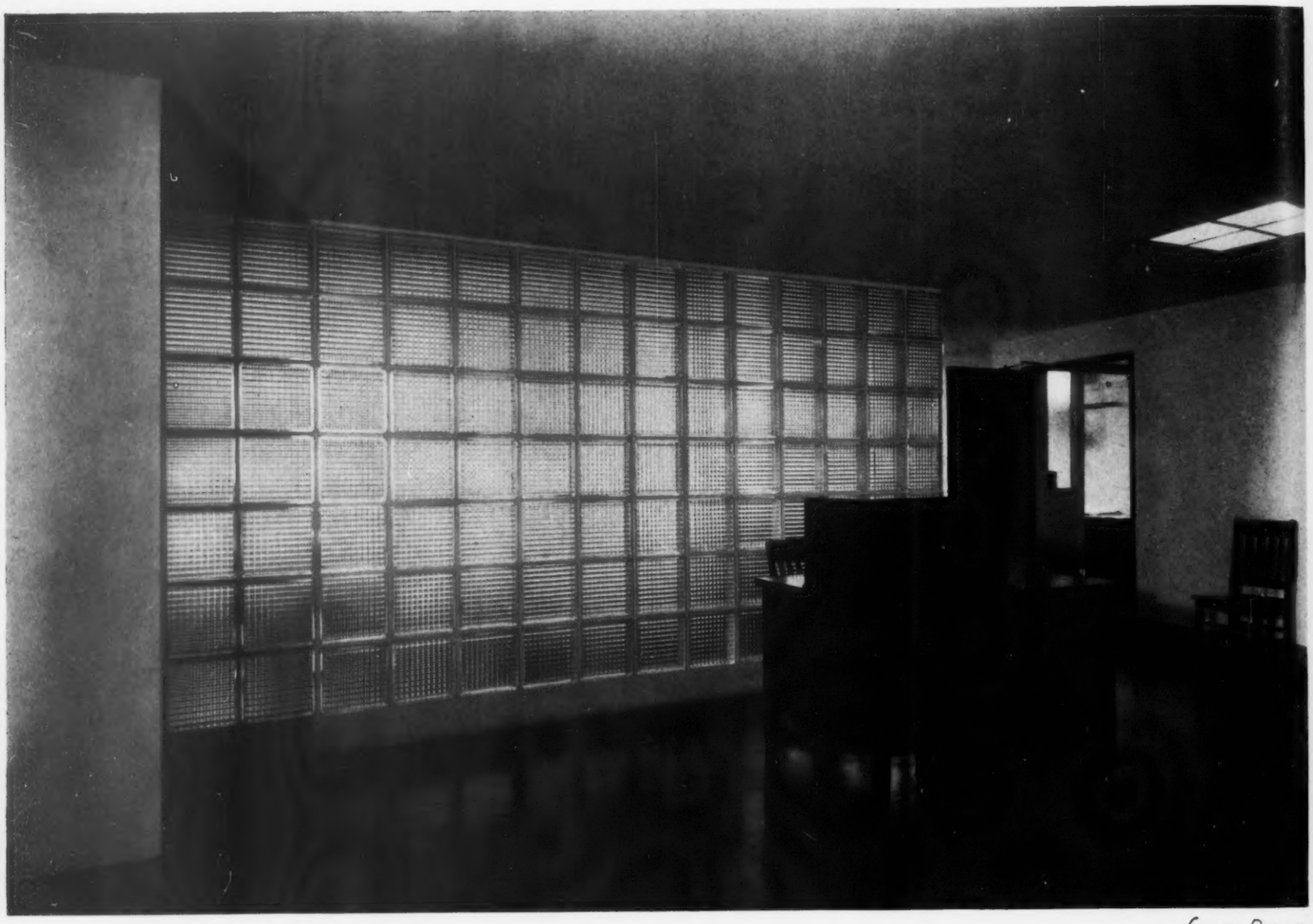


ELEVATION OF TYPICAL BAY
Scale: ¼" = 1'-0"

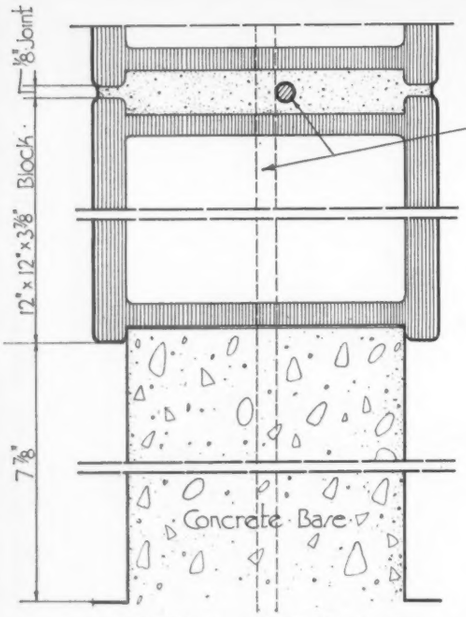
CHARLES SHILOWITZ
Architect



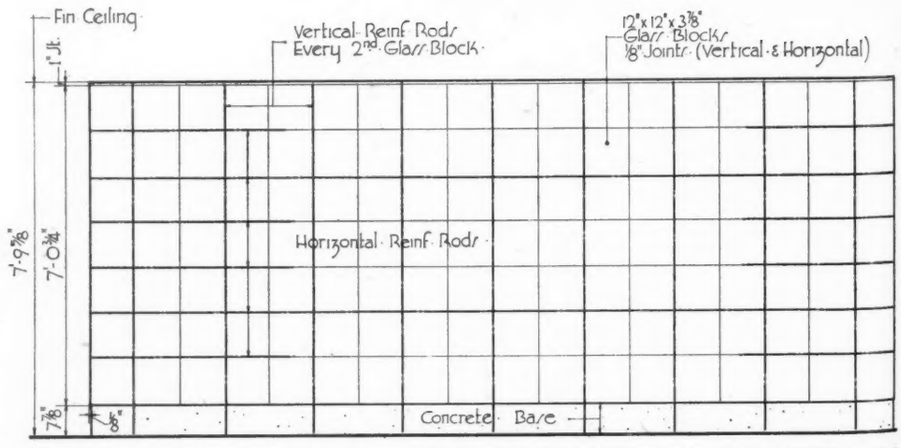
George H Van Ando



Louis · Dreyer



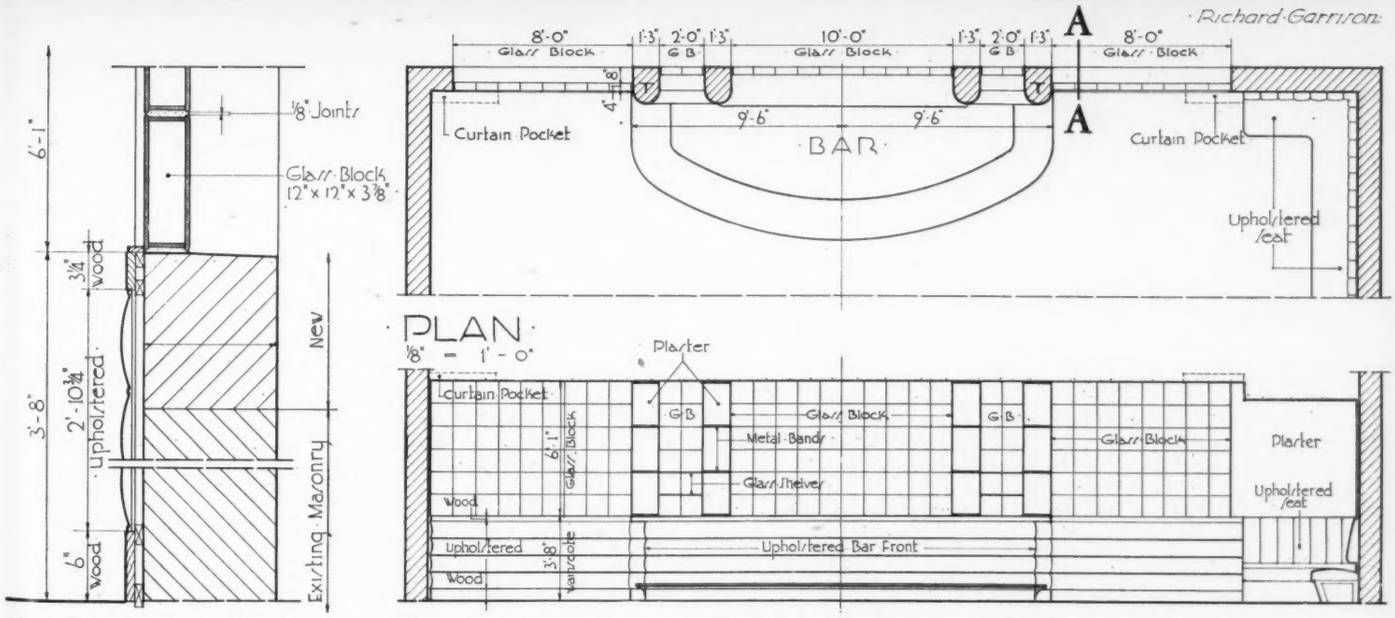
DETAIL AT BASE
Scale : Half · Full · Size



ELEVATION OF GLASS BLOCK OFFICE PARTITION
Scale : ¼" = 1'-0"

HARRISON & FOUILHOUX
Architects

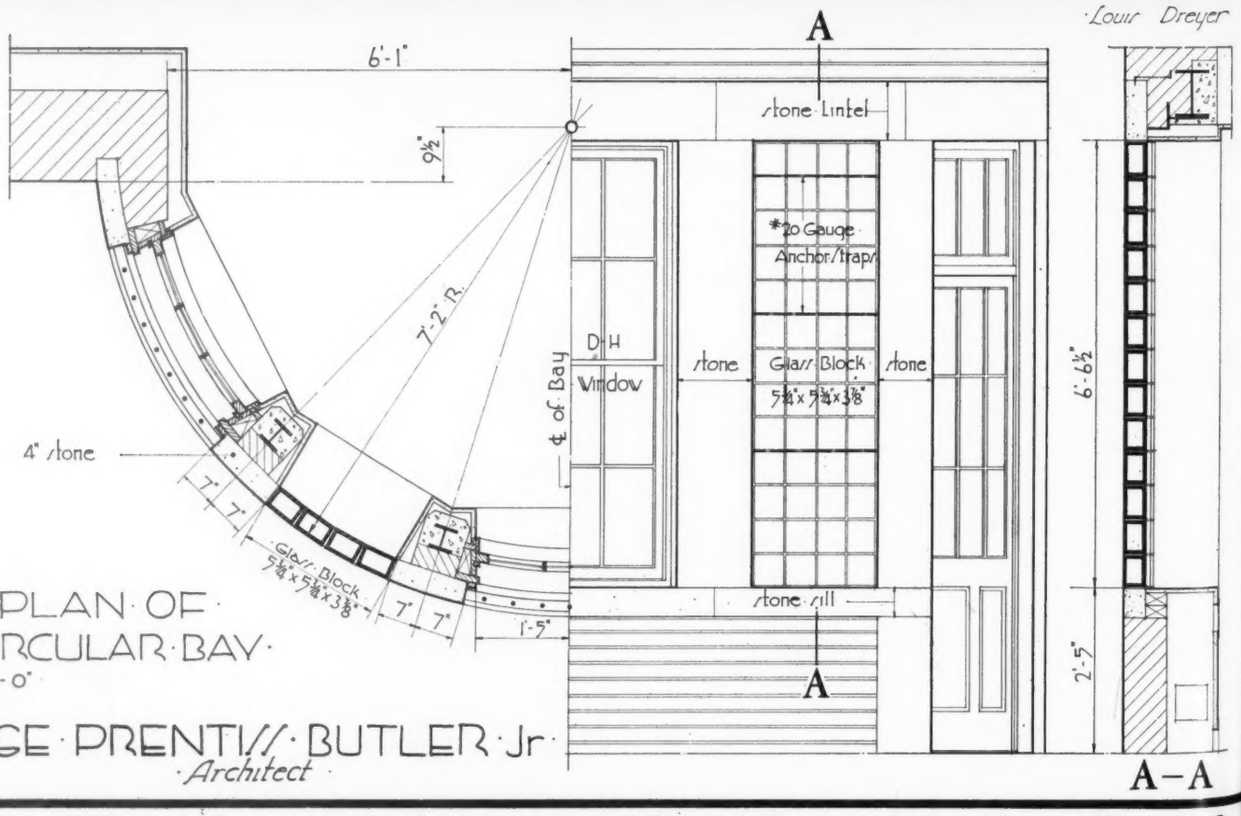
Richard Garrison



SECTION · A–A
Scale: 3/4" = 1'-0"

ELEVATION OF RESTAURANT BAR ROOM
Scale 1/8" = 1'-0"

SCOTT & TEEGEN
Architects

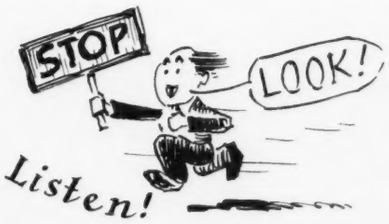


HALF · PLAN · OF
SEMI-CIRCULAR · BAY ·
Scale: ⅜" = 1'-0"

Louis Dreyer

GEORGE · PRENTISS · BUTLER · Jr ·
Architect

GUPTILL'S CORNER

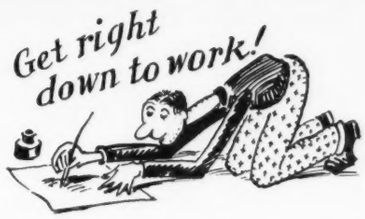


Big NEWS! Without any previous announcement, we're off on a brand new GUPTILL'S CORNER COMPETITION! Read the program below! Grab your materials! Start today! And don't overlook the delivery date, January 15th, 1937.

Here's the why and how. I was thinking about my own tree sketches of the last few months. What to do next? Run more of them or turn to something else? Swap to other media? Or what? Or what? Or what?

Then came the idea. 'Bout time for another competition: why not one on sketching trees? Some of you had asked for it so why not give it and see what you could do?

So here you are, folks. Walk right up. Try your luck and skill! Win one of the usual mammoth (?) prizes or coveted mentions!



PROGRAM Your problem is to make an effective tree sketch, the subject to be of your own choosing. Preferably it should be from nature, though work from photograph is acceptable: it should not appear too photographic. It can depict any season. Sketches copied from other drawings or based on them to the point where they seem to imitate them are not eligible. Tree renderings of the type common to architectural presentation are not wanted.

Any medium, such as pencil, charcoal, crayon, pen and ink, brush and ink, dry brush, wash, etc. (or any combination of these), may be used, though color in any form is prohibited.

Paper may be rough or smooth; white, gray or black. It must measure *exactly* 11" x 14". Thin paper should be mounted. Unmounted tracing paper is prohibited. Paper may be placed either vertically or horizontally. The drawing may fill the entire sheet or not. Margin lines are optional as are effects which are vignetted (allowed to fade at the edges). If some particular species of tree dominates the sketch, its name should be given, either lettered on the sketch (as a title) or on the margin: further lettering is optional. Drawings with a tendency to smooch must be sprayed with fixatif.

A contestant may submit one or more sketches but no contestant is eligible for more than one prize.

Each drawing shall be unsigned, and shall exhibit no identifying marks other than a *nom de plume* or device, done at small scale on the front. Accompanying each drawing there must be a plain, opaque sealed envelope, containing the true name and complete address of the contestant. The *nom de plume* of the contestant shall appear on the outside of this envelope. The envelopes will be opened only after the awards have been made.

DELIVERY Drawings must be mailed flat, postpaid, fully protected against creasing, to Guptill's Corner, PENCIL POINTS, 330 West 42nd St., New York, N. Y., in ample time to be delivered on or before January 15th, 1937. Drawings will be given every reasonable care, but are sent at the owner's risk.

JUDGMENT The drawings will be judged during the last of January by a qualified Jury appointed by PENCIL POINTS. Judgment will be based mainly on artistic merit. Choice of Subject, Composition, and logical expression of the subject matter will have as much weight as technical excellence. Immediately the drawings are judged, the winning contestants will be notified by mail. General announcement of the results will appear in the February issue, a copy of which will be sent to every contestant.

THE PRIZE DRAWINGS The report of the Jury will also be published in the February issue, as will some of the prize drawings. The other prize and mention drawings will be reproduced in the issues immediately following. These drawings become the property of the Reinhold Publishing Corporation, publishers of PENCIL POINTS, and the right is reserved to publish or exhibit not only these prize drawings but any or all of the other drawings. In connection with the publication or exhibition of any drawing the name of the artist will, of course, be attached to it. The drawings of unsuccessful contestants will be returned, postpaid, within a reasonable time.

PRIZES There are no cash prizes. All prizes are in the form of PENCIL POINTS Books, selected from the list printed on page 46, Advertising Section, of this issue. Books to a total list value of sixty-five dollars will be given, as follows:—First prize, $25; Second prize, $15; Third prize, $10; three Fourth prizes, $5 each. These books will be sent prepaid to the winning contestants as soon as selected by them. Mentions (honorary) may be awarded at the option of the Jury.

So that's that. Now get busy, remembering that the procrastinator seldom wins a prize.

When I popped the question about the stained woodwork in the Eagle Bridge, N. Y., railroad station I stirred up far more interest than I anticipated. Have I had letters! And from real authorities! I'm not going to try to pick the best answer, for there are too many good ones. But let me quote from a few which are especially fine.

Erwin M. Lurie, Civil Engineer, of Chicago, says, in part, "Streaks on plastered ceilings are caused by the difference in conductivity of the materials behind the plastering. Moisture in one degree or another is always present in inhabited rooms. At various times during the year, notably during the heating season, there is generally a marked difference in temperature between the inside air, especially at the ceiling line, and the outdoor temperature. This causes condensation in greater or less degree, depending upon whether the inside surface has or has not reached the dew point. It will be found that where plastering is applied on wood lath, the portion which covers the lath reaches the dew point less frequently than the portion which covers the key space—that is, the open space between the lath. This is natural inasmuch as wood is a poorer conductor of heat than plaster, whereas the plaster on the under side of the ceiling at the key spaces will be more or less the same temperature as the outside temperature or the attic temperature at those spaces and naturally a lower temperature than the room. These strips between the lath will reach the dew point many more times than the portion of the plaster under the lath itself.

"In the course of the year, therefore, it will be found that when condensation occurs, it will usually take place over the key spaces and fre-

quently not at all over the wood lath portions. This condensation takes the form of minute globules of moisture and any dust in the room will collect over those key strips. Over a period of time, the dust will collect more and more so that the space between the lath will be outlined in dark streaks while the space over the lath itself will remain comparatively clean.

"The writer demonstrated this point very clearly in an uninsulated house by evaporating a number of kettlefuls of water in the kitchen on a day when the temperature outdoors was approximately zero and the attic temperature probably not more than 15° or 20° above. The inside room temperature was possibly 75° or 80°. At the end of the experiment when two or three kettlefuls of water had been evaporated, it was found that large globules of water had collected on the ceiling at the spaces representing the keys, while the globules over the portion representing the lath were very much smaller and fewer. Photographs taken at the time clearly showed that the large globules formed continuous streaks corresponding with the dirt streaks on the ceiling.

"Subsequently, the entire space above the ceiling was insulated with an eel grass or sea grass fabric which has largely eliminated the formation of the lath streaks. This follows because the temperature in the space above the ceiling more nearly approximates the temperature on the under side of the ceiling so the dew point is not reached so frequently. In one particular room in this house, the insulation was stopped about mid-point, and the lath streaks continued to show up over a period of a year or so between times when it was redecorated, while the remaining portion of the ceiling which had been insulated still showed a comparatively clean surface.

"It must not be assumed from the preceding that merely because ceilings are not streaked, there is no condensation. Streaks do not show when the ceiling construction is of such uniform nature that condensation is uniform throughout and the discoloration is likewise uniform and, therefore, a white plastered ceiling may discolor to a gray without being noticeably dirty.

"The writer has observed the preceding streaking occur on poured concrete and tile floor systems in which the portion of the ceiling plastered on the concrete beams is much darker than the portion of it plastered on the tile fillers between. Here, again, we have the difference in conductivity between the concrete and the tile, the latter being, of course, less conductive, especially when of the hollow type. Such streaking on tile and concrete floor systems is usually most noticeable on the top floor ceilings which are uninsulated. Here the temperature difference between the air above the ceiling slab and below is considerably greater than in the floors below the upper one, and the condensation point will be reached more frequently than in floors below. However, even in floors not at the top of the building, wherever there is cold air blowing along the floor, and hot ceilings below, this condensation and streaking will inevitably occur.

"As regards the solution, or means of eliminating the streaking, it is not sufficient to use a plaster base which is non-conducting throughout. This

follows because, wherever ceiling joists occur, there will be less conductivity than in the spaces between the joists. This is amply borne out by your own experience in the case of the railroad station where all the construction was of wood but where there was a greater concentration of wood at the trusses or braces over the windows. Wherever these framing members occur, you will have less conductivity and the ceilings will reach the dew point less frequently right at those points than in the wood ceiling between, with the result that there will be a light band marking the position of every framing member.

"To eliminate streaking where wood joists are used, it has been found that the use of metal or wood furring strips (and the former are preferred because they have a lesser cross sectional area) placed at right angles to the joist, with a metal lath ceiling nailed or wire-tied to the furring, provides an air space between the back of the plaster and the joists—this permits free circulation of air with the result that the ceiling slab, being of uniform material such as is true in the case of metal lath, provides uniform conductivity through it at all points. The net result is that the condensation, when it occurs, occurs uniformly and the discoloration is not noticeable.

"If, in connection with such furring, an insulating material is placed above the ceiling, it will be found that the ceiling stays cleaner for a much longer period and requires less redecorating simply because condensation over a period of time is reduced to a minimum with the result that dust particles do not have the moisture present as a medium for adhering to the plastered surface.

"In fireproof buildings or others where it is essential to keep ceilings clean over a period of years, and especially where ceilings are embellished with murals and other decorations, it is best to use a suspended ceiling construction and, whenever possible, this ceiling space should be ventilated. In addition thereto, an insulating fibre or other membrane, if placed just above the ceiling plaster, will reduce the amount of condensation so as to reduce greatly the required cleaning or redecorating of the ceiling finish.

"In multi-storied buildings of the apartment or hotel type, where attached or furred metal lath ceilings are quite commonly used under concrete, tile, or steel joisted floor members, streaking is practically nonexistent excepting on the top floor, and here a suspended ceiling is recommended for reasons given previously. The same is true for flat slab floor system members where the ceiling is frequently plastered directly on the underside of the slab, since the concrete is then of sufficient thickness to give practically uniform conductivity throughout its exposed surface.

"Streaking occurs not only on ceilings, however, but frequently on side walls, which if not properly furred will sweat in some cames to an alarming degree. To correct such conditions, wall furring of channel iron or special inserts designed to keep the inside plastering away from the outside wall surface are recommended. Walls so constructed will stay dry and warm, providing economy not only in redecorating but also in heating, and, at the same time, such houses are much more sanitary and livable."

Thank you, Mr. Lurie. That's great. I'm certain we can all profit from your explanation and suggestions.

Robert J. Brocker, Architect and Engineer, of Irwin, Pa., contributes some other valuable thoughts. He says, in part, "The explanation for the difference in appearance of the wood ceiling from that part of the ceiling where the beams and framing members occur, is that the portion of the ceiling immediately under the framing members has a higher insulating value than the portion of the ceiling between framing members; consequently, the lower insulated parts of the ceiling would show more dirt collection than the part with a higher insulating value, due to warm air strik-

(Continued on page 32, Ad Section)

PENCIL POINTS DATA SHEETS

Prepared by DON GRAF, B.S., M.Arch.

FACTS AT YOUR FINGERTIPS

Last month we promised a number of new sets of free manufacturers' *Data Sheets* to be announced in this issue of PENCIL POINTS. There were so many of them that we simply couldn't get them finished in time so you will have them to watch for in future issues. Don't miss them for they are unusually interesting and useful. The sets are on widely different subjects —containing much information of a general nature as well as specific applications of the products themselves.

Last year we made a special reduced price on the *Data Sheet Library* in the month of December. We are repeating this offer now. If you do not have a complete *Data Sheet Library*, here is a chance to obtain this really time-saving reference at a greatly reduced price. This offer is good during the month of December only. Turn now to advertising page 42 for details.

PENCIL POINTS DATA SHEETS

ACOUSTICAL ABSORPTION COEFFICIENTS

Prepared by Don Graf, B.S., M.Arch.

Sheet No. **F8j** Dec., 1936

Quietile

Type	Thickness	Mounting	Coef. at 512	Noise Red. Coef.	Lbs. sq. ft.	Finish*
	½"	1	.58	.60	.43	Unpainted
	1"	1	.73	.70	.67	Unpainted
Balsam Wool Acoustical Blanket						
EE	1"	4	.61	.65	.27	
EE	1"	12	.63	.65	.27	
Rockwall Acoustical Plaster						
	½"		.40	.50	1.6	
Standard Macoustic Plaster						
	½"		.35	.40	1.9	
Reverbolite Acoustical Plaster						
	½"		.30	.35	1.8	
Sabinite Acoustical Plaster						
A	½"		.31	.50	2.2	
A	¾"		.56	.55	3.3	
38	½"		.32	.50	2.2	

Types of Mounting

1. Cemented to plaster board. Considered equivalent to cementing to plaster or concrete ceiling.
2. Nailed to 1" x 2" wood furring 12" o/c.
3. J-M Sanacoustile Tile. Metal supports applied to 1" x 2" wood furring.
4. Blanket laid directly on laboratory floor.
5. U.S.G. Perfatile. Metal supports applied to 1" x 2" wood furring.
6. 1" Absorbex nailed to 1" x 3" wood furring 18" o/c and filled in between furring with 1" mineral wool.
7. 1" Calicel laid loosely on 2" x 4" wood furring giving 3½" air space.
8. Nailed to 2" x 4" wood furring 24" o/c.
9. 1" Absorbex nailed to 2" x 4" studs, 18" o/c, and filled between studs with 3½" thick mineral wool.
10. Same as 2, 24" o/c.
11. Same as 2, 16" o/c.
12. Same as 2, 18" o/c

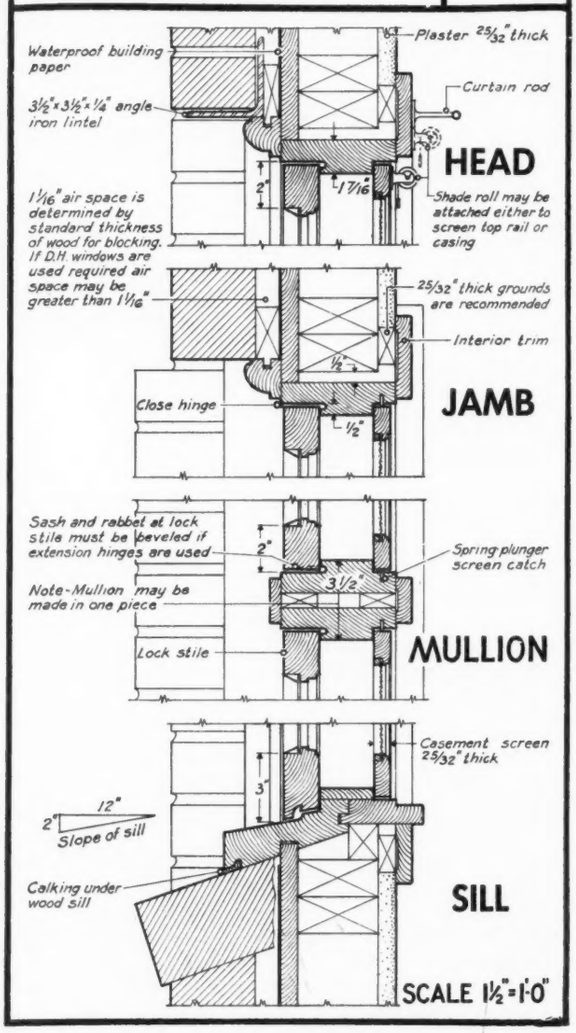
*Coefficients of absorption have been taken from Acoustical Materials Association Bulletin No. IV, March, 1936. *Finished according to manufacturer's directions.*

PENCIL POINTS DATA SHEETS

OUTSWINGING CASEMENT IN BRICK VENEER

Prepared by Don Graf, B.S., M.Arch.

Sheet No. **F3c** Dec., 1936



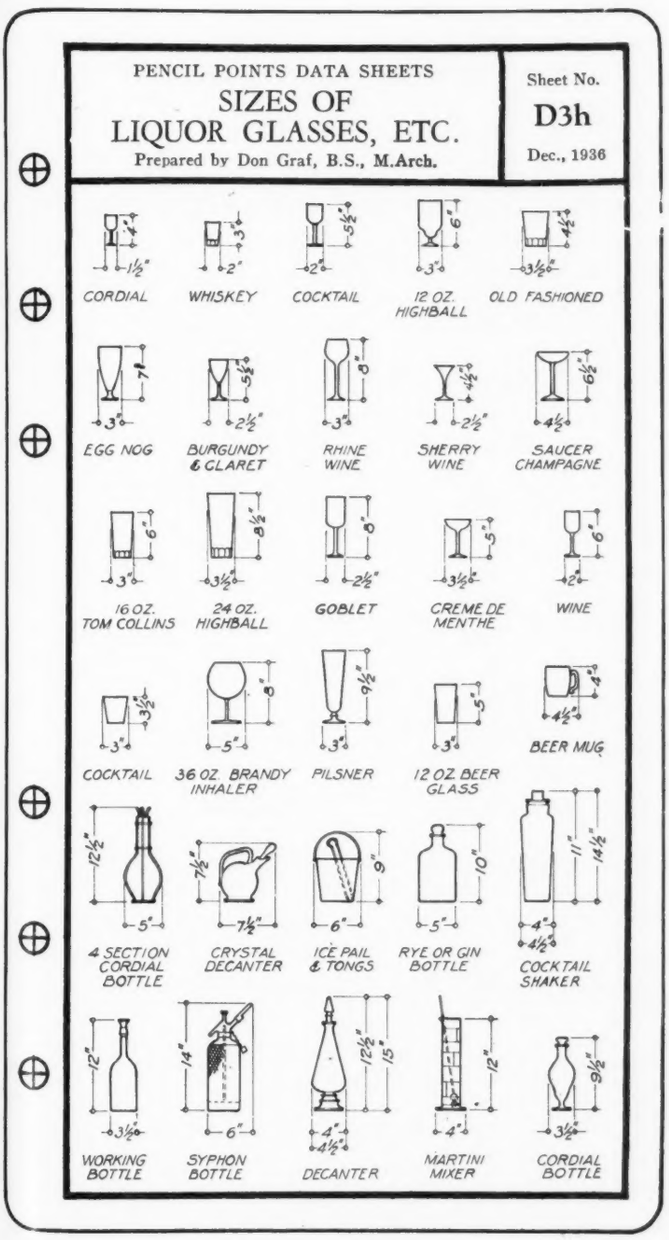
This special offer is made to increase the size of the *Data Sheet* family—so, even if you have a *Data Sheet Library*, it is to your advantage. The more *Data Sheet* users we have, the more manufacturers who will sponsor sets of free *Data Sheets* on their products.

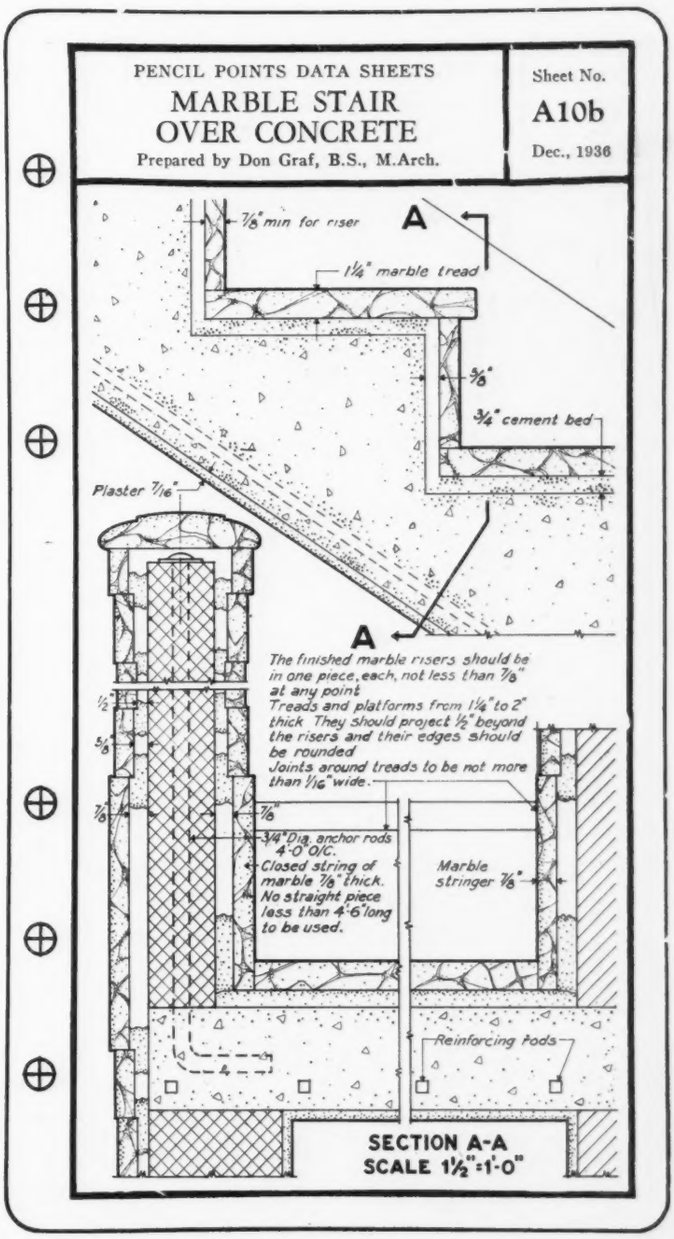
DATA SHEET NO. F8j. This sheet completes the series giving you the acoustical coefficients of various manufactured materials. Future issues will contain information on quieting and soundproofing.

DATA SHEET NO. F3c. Another sheet in the series on window construction. Others are planned for presentation in forthcoming issues.

DATA SHEET NO. D3h. In the planning of whoopee rooms, restaurants and bars, this *Data Sheet* will give you a representative group of dimensions to work from.

DATA SHEET NO. A10b. This detail has been approved by the National Association of Marble Dealers. Last month we presented a similar detail for a marble stairway over steel.




PENCIL POINTS DATA SHEETS
MARBLE STAIR OVER CONCRETE
Prepared by Don Graf, B.S., M.Arch.
Sheet No. A10b
Dec., 1936
7/8" min for riser
A
1 1/4" marble tread
5/8"
3/4" cement bed
Plaster 7/16"
A
The finished marble risers should be in one piece, each, not less than 7/8" at any point
Treads and platforms from 1 1/4" to 2" thick. They should project 1/2" beyond the risers and their edges should be rounded
Joints around treads to be not more than 1/16" wide.
3/4" Dia. anchor rods 4'-0" O/C.
Closed string of marble 7/8" thick. No straight piece less than 4'-6" long to be used.
Marble stringer 7/8"
Reinforcing rods
SECTION A-A
SCALE 1 1/2" = 1'-0"

The special insert on the facing page is included in PENCIL POINTS *at the suggestion of W. Pope Barney of Philadelphia, who felt that the thoughts so admirably expressed by Pavlov are as applicable to the architectural youth of America as to the academic youth of Russia. The page was designed and composed in Baskerville type by the Aldus Associates, Inc., of New York*

BEQUEST OF

IVAN PAVLOV TO THE ACADEMIC YOUTH OF HIS COUNTRY

*

FIRSTLY, Gradualness. About this most important condition of fruitful scientific work I can never speak without emotion. Gradualness, Gradualness, and Gradualness. From the very beginning of your work, school yourselves to severe gradualness in the accumulation of knowledge. Learn the ABC of science before you try to ascend to its summit. Never begin the subsequent without mastering the preceding. Never attempt to screen an insufficiency of knowledge even by the most audacious surmise and hypothesis. Howsoever this soap bubble will rejoice your eyes by its play, it inevitably will burst and you will have nothing except shame. School yourselves to demureness and patience. Learn to inure yourselves to drudgery in science. Learn, compare, collect the facts! Perfect as is the wing of a bird, it never could raise the bird up without resting on air. Facts are the air of a scientist. Without them you can never fly. Without them your "theories" are vain efforts. But learning, experimenting, observing, try not to stay on the surface of the facts. Do not become the archivists of facts. Try to penetrate to the secret of their occurrence, persistently search for the laws which govern them.

SECONDLY, Modesty. Never think that you already know all. However highly you are appraised, always have the courage to say of yourself—I am ignorant. Do not allow haughtiness to take you in possession. Due to that you will be obstinate where it is necessary to agree, you will refuse useful advice and friendly help, you will lose the standard of objectiveness.

THIRDLY, Passion. Remember that science demands from a man all his life. If you had two lives that would be not enough for you. Be passionate in your work and your searchings.

*

Translated from the Russian by Professor P. Kupalov, Chief Assistant, Pavlov Institute at Leningrad

THE MONOGRAPH SERIES

RECORDS OF EARLY AMERICAN ARCHITECTURE

EDITED BY RUSSELL F. WHITEHEAD, A·I·A

VOLUME XXII

MONOGRAPH SIX

Little Compton and Tiverton Four Corners

BY JOHN C. HALDEN

Research and Measured Drawings by Frank Chouteau Brown, A.I.A.
Photographs by Arthur C. Haskell

The extreme southern part of the area, now in Rhode Island, and situated between the Massachusetts boundary and the Sakonnet River below the township of Tiverton, is known as Little Compton. It contains a great deal of rolling, rocky upland; a swampy and much indented seacoast; some old farms and fishing settlements; many old houses, and, at the present time, three principal villages. Sakonnet, a small cluster of fishing shacks, small cottages, and modest summer places, is located at the extreme southwestern tip of the area, almost at Sakonnet Point. Adamsville, a small village at the head of a deep sea inlet, of old and new houses, grouped about the old Manchester Store, in the northeasternmost corner of the township. And Little Compton Commons—another very small settlement, almost in the geographical center of the area—and also a mixture of old and new dwellings, a smithy-garage, and a few stores.

Otherwise the township contains much unoccupied and barren land, many Indian sites and burial grounds, a fairly large number of summer cottages, especially along its eastern coastline—and a scattering but surprisingly large number of old homesteads, principally aligned along the main north and south roadway, extending up to Tiverton and Fall River at the north.

In early times all this area was occupied by the Seaconnet tribe of Indians, under Philip of Pokanoket; and Benjamin Church, of Duxbury, a carpenter, is believed to have been the first white settler, in 1674. After King Philip's War, Capt. Church settled in Bristol and died there in 1718. The name is supposed to have been taken from Little Compton, of Oxfordshire, England. The town was incorporated in 1682; and was transferred from Massachusetts to Rhode Island along with four other townships—of which Tiverton was one—in January, 1746-7. Elizabeth Alden, the first white woman born in New England, died May 31, 1717, when 94 years old, and was buried in the Village cemetery. In 1790, the township is recorded as having 1542 white inhabitants—with 23 slaves; which is probably considerably more than its winter population today!

Adamsville is a small group of houses clustered about an old store, at the head of an estuary extending a considerable distance inland from the ocean to the south. It is just below the northern line boundary of Little Compton, in its extreme northeastern corner, and it is necessary to pass through this village in order to reach a portion of the Massachusetts area in the township of Westport.

Among some other items of local interest, it is perhaps most widely known from the fact that the Rhode Island Red breed of fowl originated—or was developed—within the surrounding vicinity, and a large bronze tablet erected in commemoration of that fact may be seen upon an old boulder beside the road nearly opposite the Manchester Store. This old store was built by Ebenezer P. Church, in 1820, and is still in use, with much of the original equipment, and little concession to modern ideas of display of merchandise—as may be gathered from the views made of the exterior late this fall. Ebenezer Church, by the way, is claimed to have been a Great-great-uncle of President Franklin D. Roosevelt—which, at this particular date

and year, may be an object of rather more than pertinent interest. The store came into the possession of Philip Manchester in 1839, and has ever since been run by some member of that family.

One of the most attractive houses in the local group is a large white structure, overshadowed by huge trees eighty to a hundred feet high, located almost upon the Massachusetts line, a few hundred feet to the east of the store. It dates from about 1818-25; and two other appealing smaller houses are found nearby, one across the street to the west of the store, and another down the side street leading to the isolated part of Westport.

From this small, quiet village the principal east and west roadway climbs steeply up a hill, past a little stone cottage, and after many turns and twists passes another shrub-embowered small cottage and then enters Little Compton Commons, a somewhat larger group of houses nearly halfway to the shores of the Sakonnet River. Here is located the small but attractive Brownell Cottage, with its divided stairway. There is also a small cemetery nearby containing many old headstones with unique inscriptions, which attracted many tourists to obtain rubbings.

A mile or so north of the Little Compton upper boundary, and near the southern edge of Tiverton, is located Tiverton Four Corners; an intersection of the main north and south roadway with a cross road, that continues to the east and south to pass into Little Compton territory at Adamsville—where it almost as instantly passes *out* of Rhode Island, into Massachusetts!

At this intersection, still marked by two old houses and two stores, is also to be seen, upon the southeast corner, the old Whipping Post—a flat stone slab, only a few inches thick and standing about six feet out of the ground—which was much used by Judge Almy, between 1719 and 1812, according to local tradition, especially for the punishment of slaves. Next adjoining is the oldest store, also long in use as the Post Office, but known as the John Almy House, built in 1797—with a charmingly typical gambrel-roofed cottage just beyond.

Only a few hundred yards beyond this intersection, to the south, is the old Peregrine White grist mill, where old residents brought their grain to be ground into Rhode Island "Johnnie Cake Meal"; and which, according to the sign upon its road front, is still worked two days of each week! Within a short half-mile distance are still to be seen this mill, one of the stores, and no less than four of the old houses built by members of the White family—several of which still house their descendants—the White Homestead, a little south of the Mill (and almost upon the Little Compton boundary), has been occupied by at least seven generations of that family. Its original builder was a well known sea captain on whaling vessels running out of New Bedford. The White family burying ground was located upon this farm and contained, among others, the stone in memory of the child of Peregrine White of the Mayflower (said to be the first born of Mayflower stock), but the old headstones have recently been taken up and removed to the Amicable Churchyard, nearby.

Turning west, across a salt water inlet, onto Punkateest Neck, is the Colonel Cooke House, shown as a landmark upon an old map of 1730, which—despite some regrettable Victorian changes—has retained a charming old doorway, the almost unique "stoep" illustrated, and one rarely beautiful interior!

Following on south along this same highway, one passes other old houses overlooking the Sakonnet River, and Newport Island to the west. Here about all the other dwellings shown or mentioned in this issue are located, including the Oliver H. Almy House, from which a simple but typical mantel has been drawn, and the house of Captain Robert Gray, who discovered the Columbia River, and was the first American to carry the Stars and Stripes around the world. Another historic house is that usually known as the "Betty Alden House." The east portion was built in 1682 by William Pabodie to house himself and his wife, Elizabeth Alden—who was the first white woman born in New England. They were among the first settlers, and their descendants occupied the house, until it came into the possession of Col. Pardon Gray, in 1762, when the western part was added. The mantel, here drawn, is in the old "Fire room" of the original house, while the fireplace shown in the photograph is now in the Dining Room. Nearly across from this dwelling is the home of two other original settlers, Samuel and Mary (Potter) Wilbor, built in 1691, and occupied by eight generations.

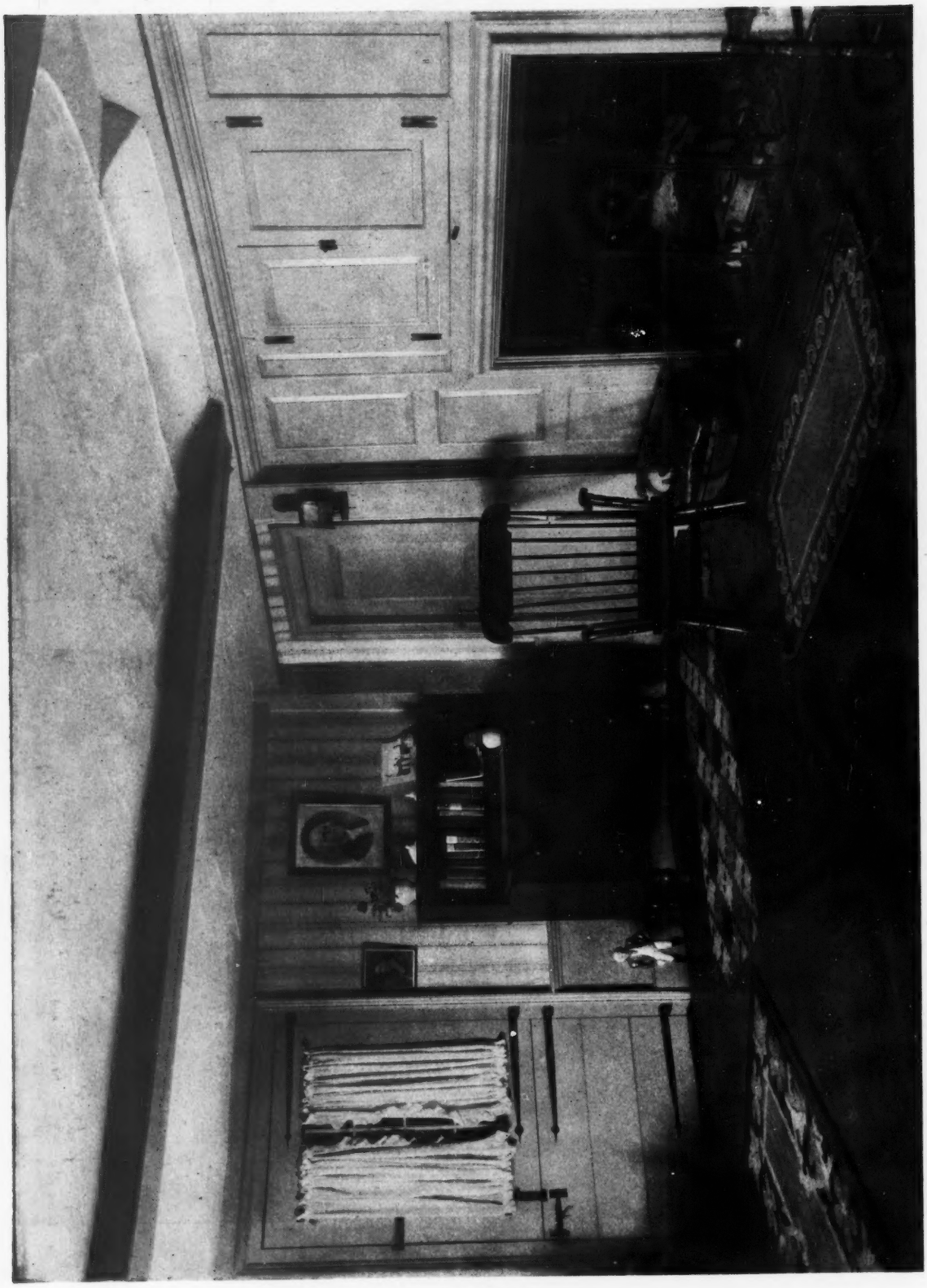
The home of William and Sarah (Haywood) Dye, now known as "Duffield Farms," is a picturesque and rambling structure, displaying the obvious changes and additions that have been made by many generations of dwellers. The early "block-house" has been almost completely engulfed by these many additions; and while the original portion was built in 1684, by these two "first settlers," it has housed many other well known persons, among them John Gray, a soldier in the American Revolution.

This main highway continues out to the extreme end of the peninsula, to the lighthouse at Sakonnet Point, passing along the way other early houses and cottages, and many newer summer dwellings—particularly in the southwestern portion of the township, overlooking the shores and beaches along the lower Sakonnet River and the Ocean.

THE SAMUEL AND MARY (POTTER) WILBOR HOUSE—1691—LITTLE COMPTON, R. I.

(Measured Drawings of Mantel on Page 95)

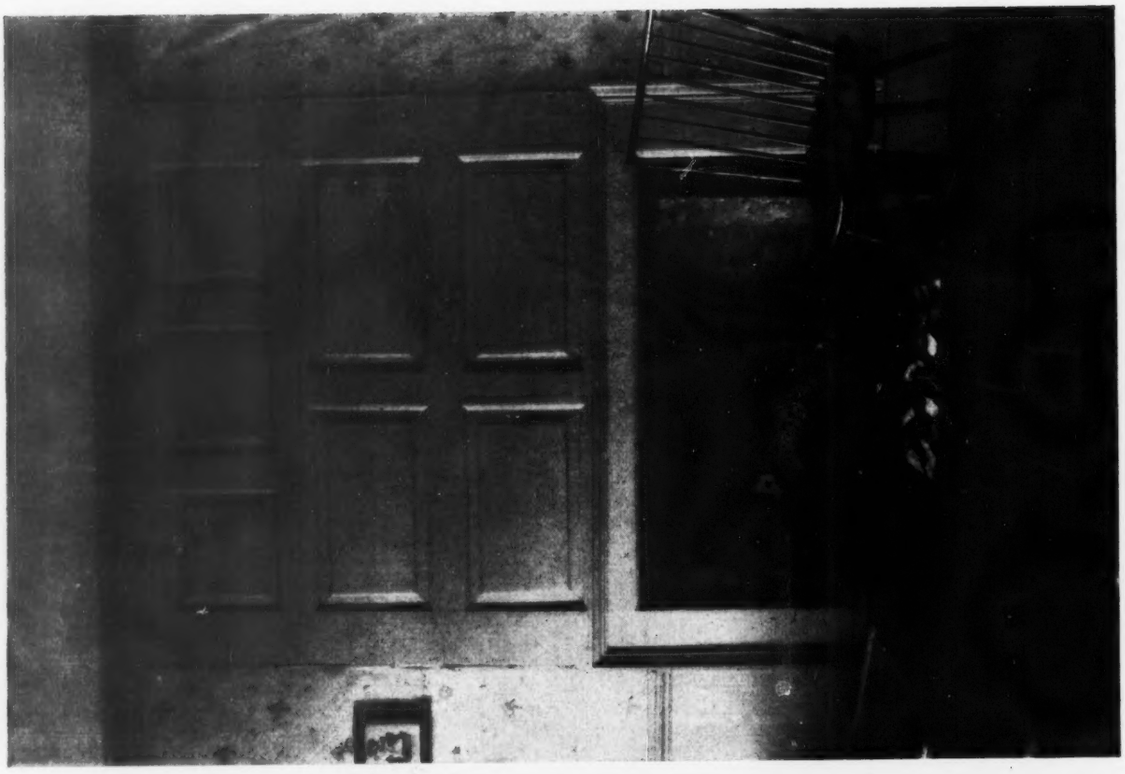
THE OLIVER H. ALMY HOUSE, LITTLE COMPTON, RHODE ISLAND



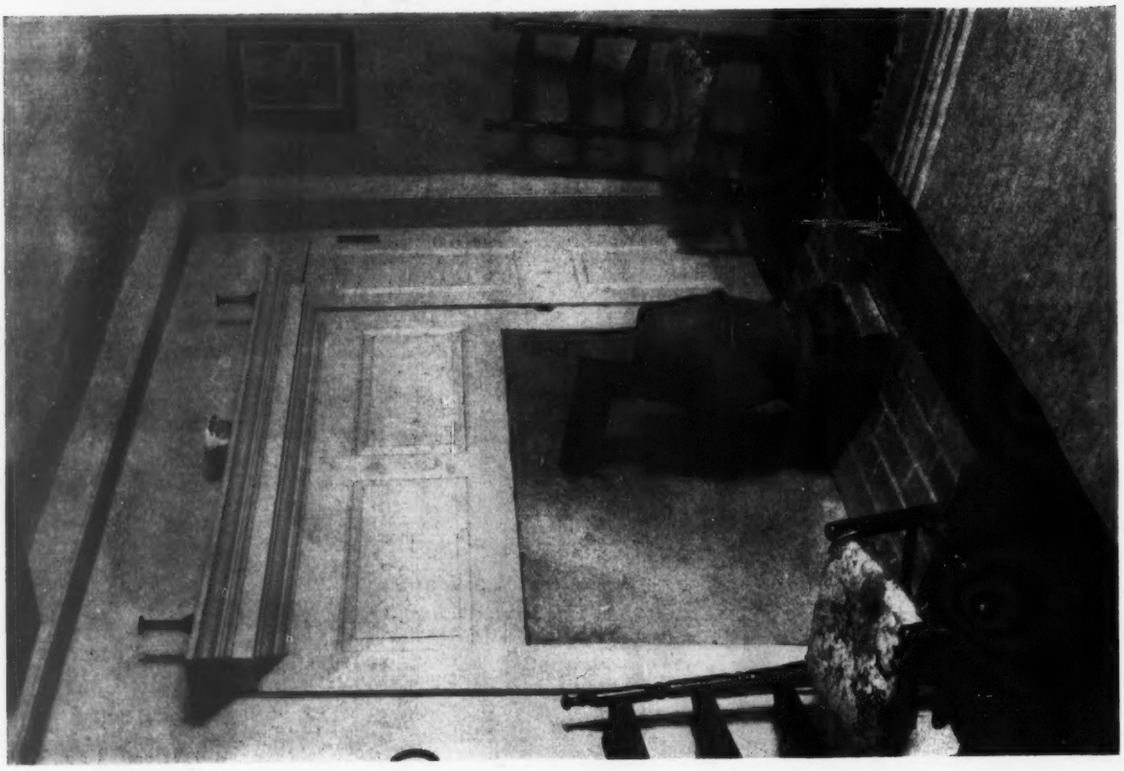
THE AMASA GRAY HOUSE, LITTLE COMPTON, RHODE ISLAND

[84]

THE AMASA GRAY HOUSE, LITTLE COMPTON, RHODE ISLAND



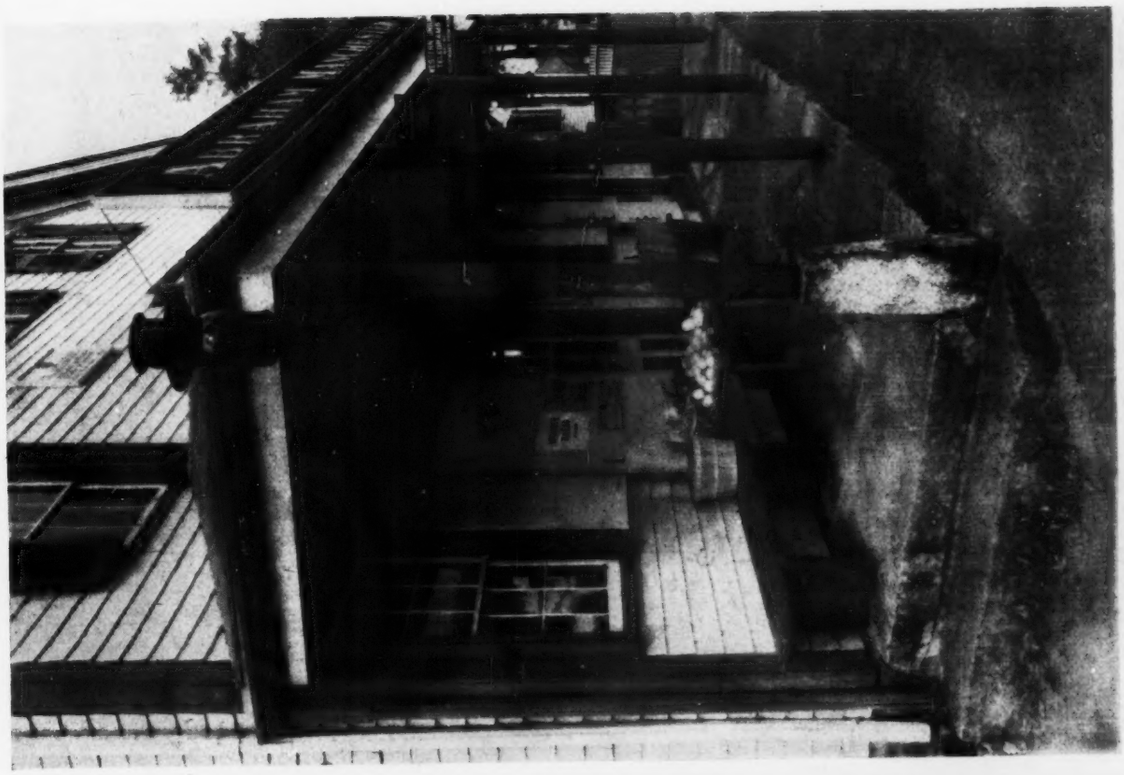
Mantel—Second Floor



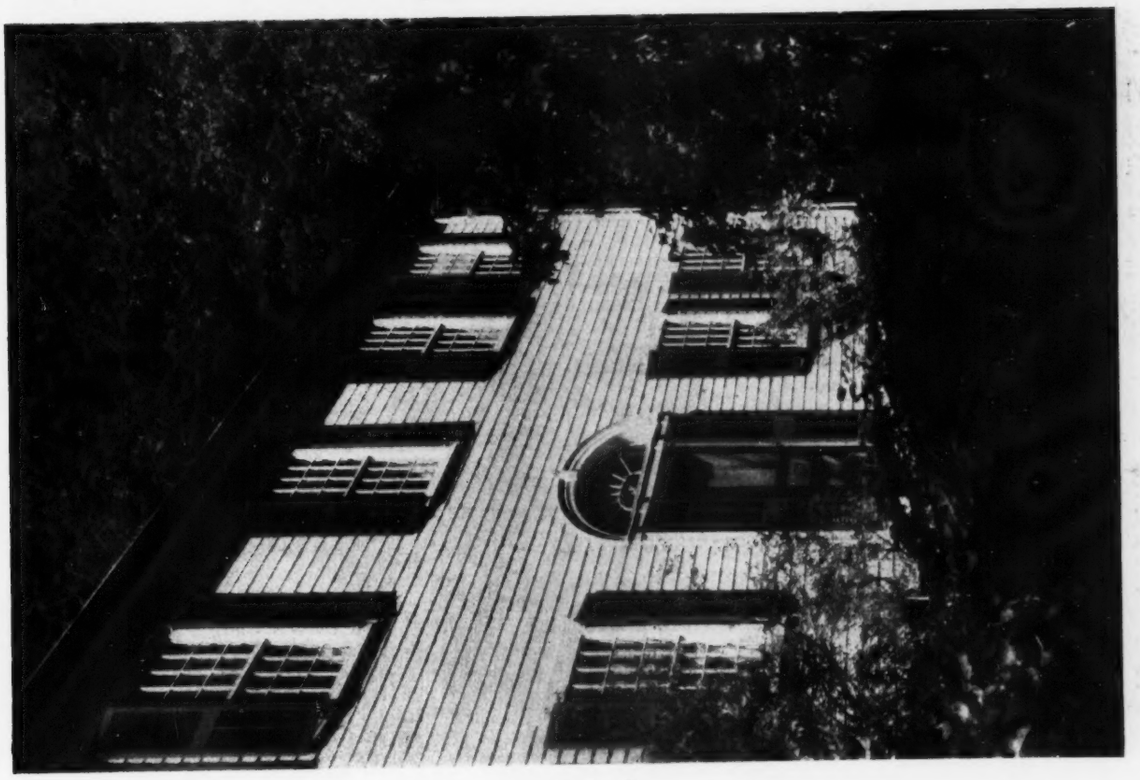
Mantel—Second Floor

THE AMASA GRAY HOUSE, LITTLE COMPTON, RHODE ISLAND

[86]



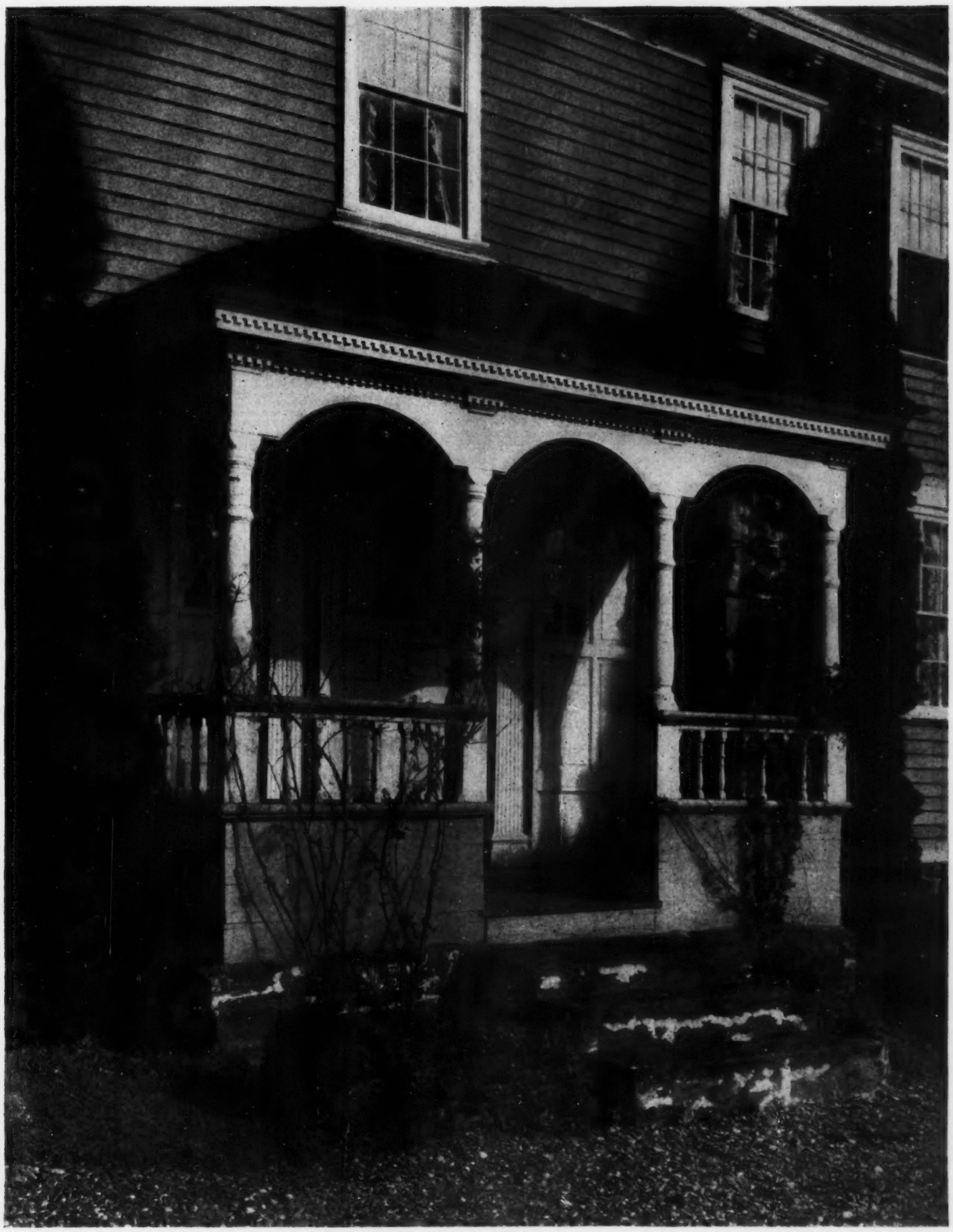
THE MANCHESTER STORE, ADAMSVILLE, RHODE ISLAND



THE WHITE HOUSE, ADAMSVILLE, RHODE ISLAND

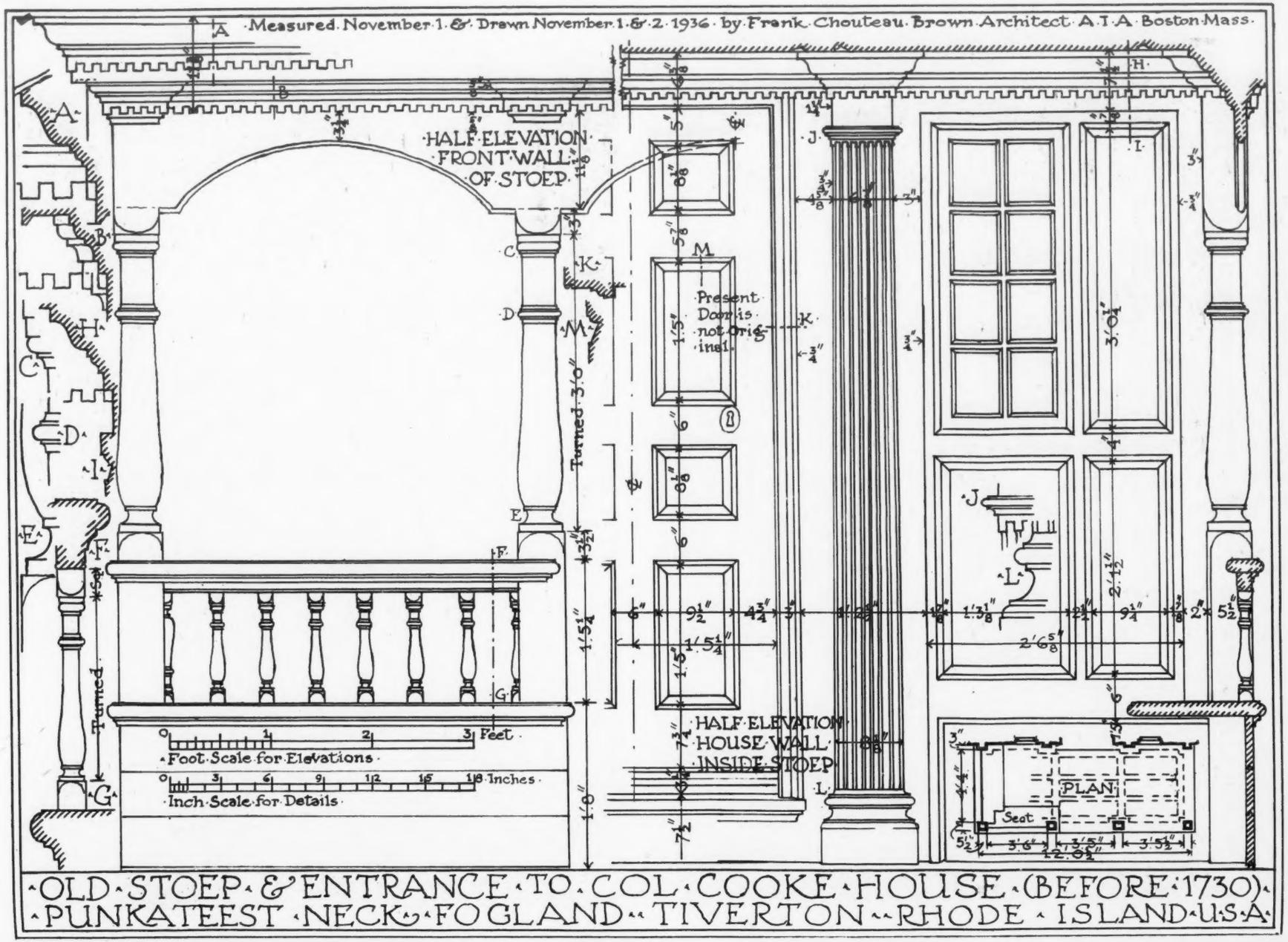
Detail of Side Doorway
THE COLONEL COOKE HOUSE, PUNKATEEST NECK, RHODE ISLAND

[88]



(Measured Drawings on Page 90)

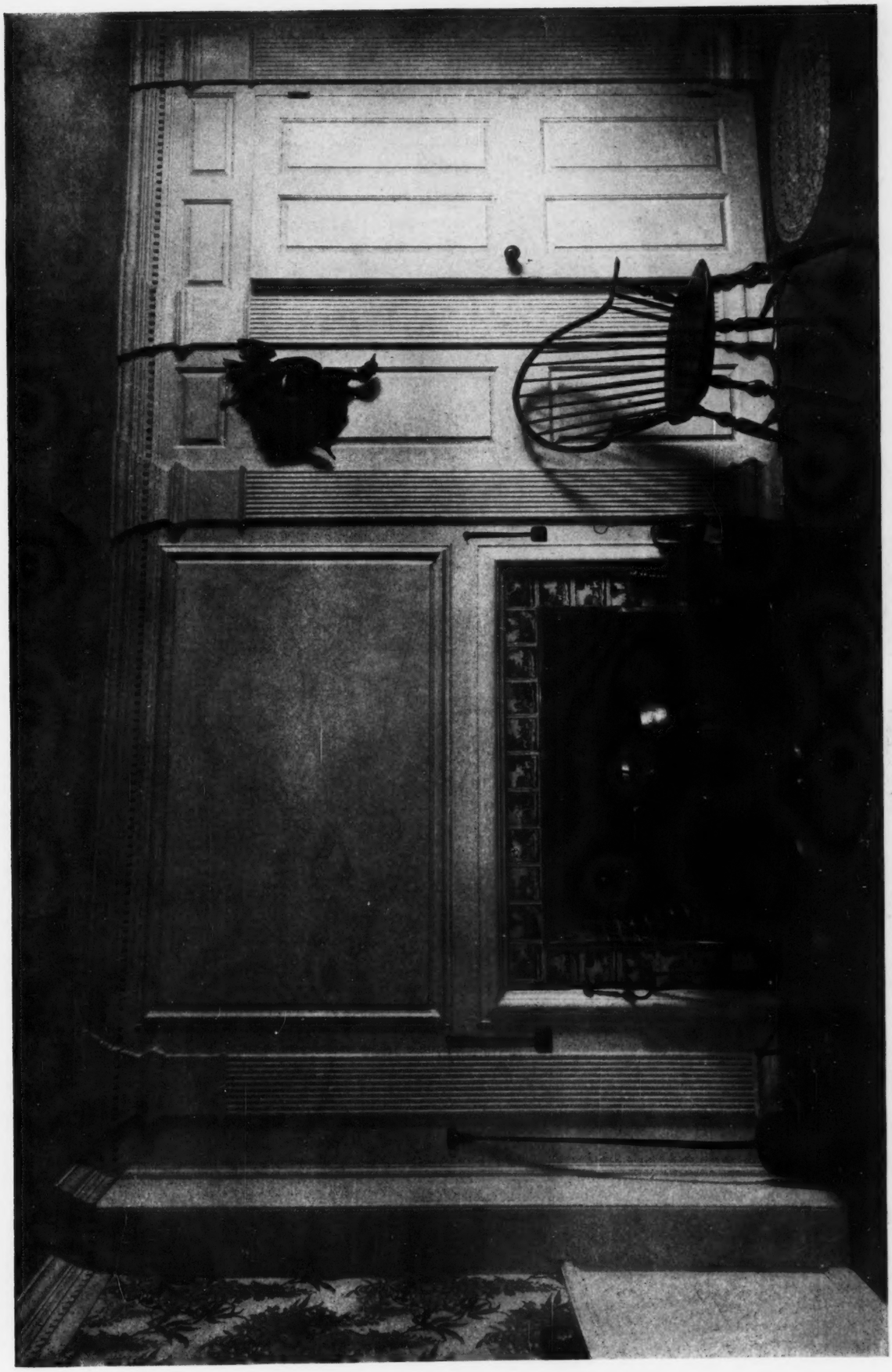
OLD STOEP—COLONEL COOKE HOUSE, PUNKATEEST NECK, R. I.


Measured November 1 & Drawn November 1 & 2 1936 by Frank Chouteau Brown Architect A.I.A. Boston Mass.
HALF ELEVATION FRONT WALL OF STOEP
Present Door is not Original
Turned 3'0"
Turned
HALF ELEVATION HOUSE WALL INSIDE STOEP
PLAN
Seat
Foot Scale for Elevations
Feet
Inch Scale for Details
Inches
OLD STOEP & ENTRANCE TO COL COOKE HOUSE (BEFORE 1730)
PUNKATEEST NECK FOGLAND TIVERTON RHODE ISLAND U.S.A.

OLD STOEP AND ENTRANCE TO COL. COOKE HOUSE, PUNKATEEST NECK, RHODE ISLAND

THE COLONEL COOKE HOUSE (BEFORE 1730), PUNKATEEST NECK, TIVERTON, RHODE ISLAND

[92]

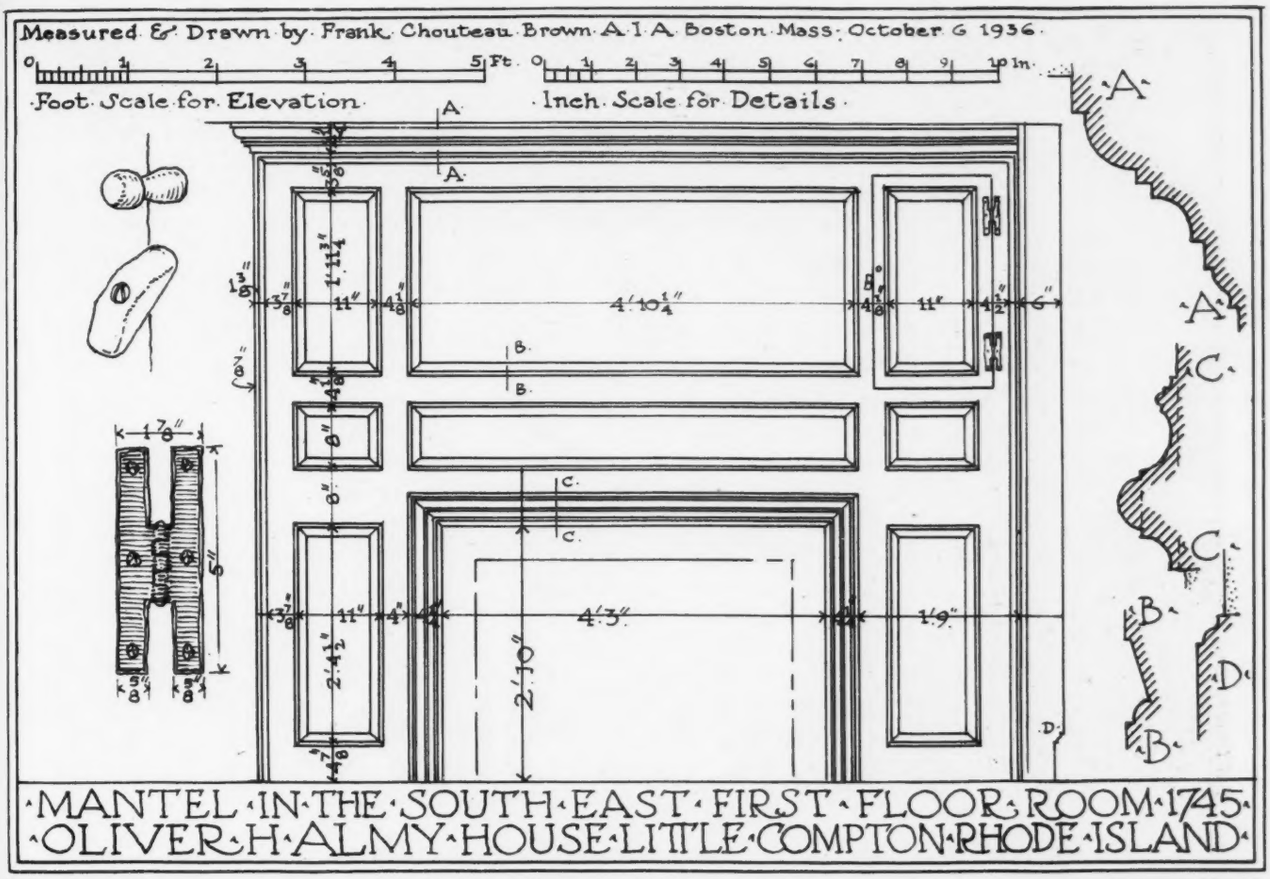


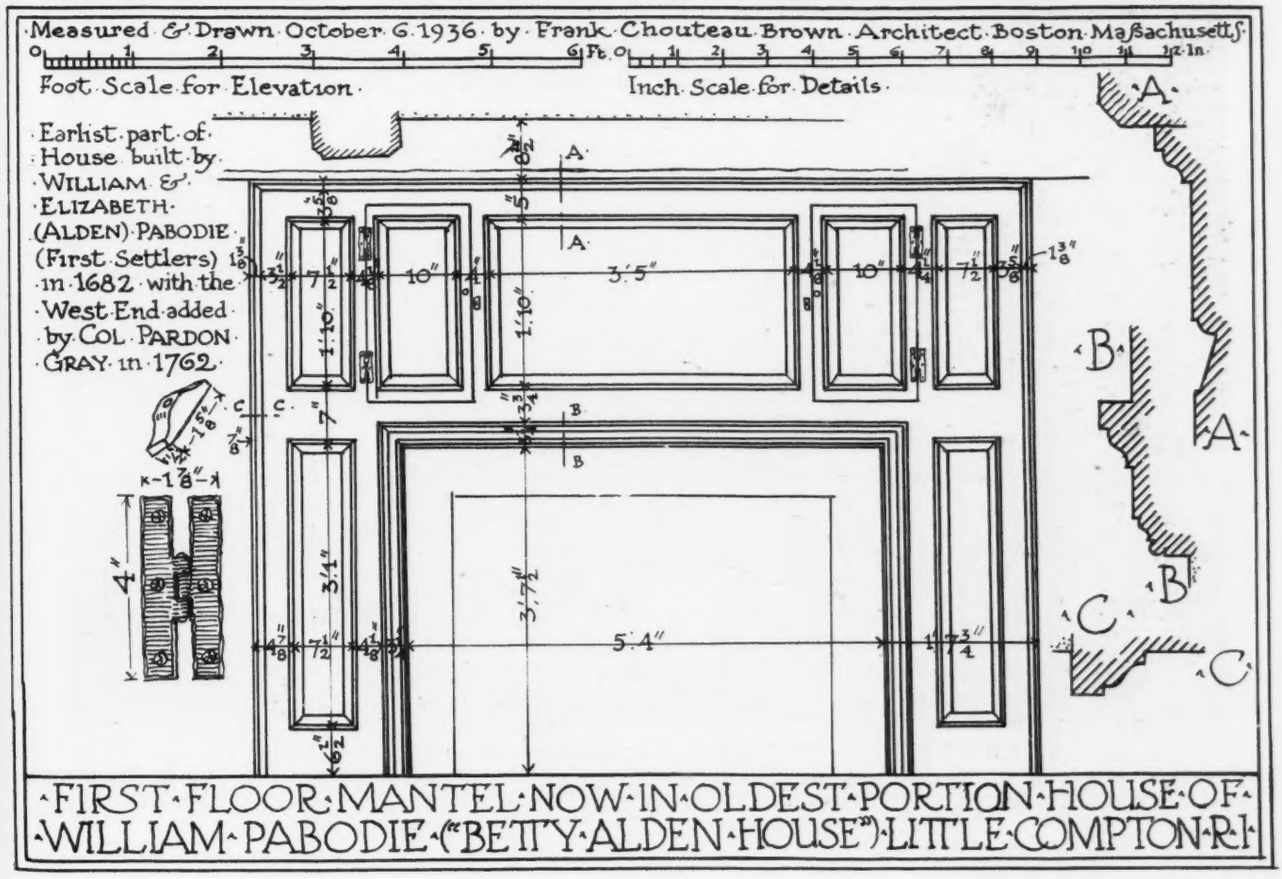
THE COLONEL COOKE HOUSE (BEFORE 1730), PUNKATEEST NECK, TIVERTON, RHODE ISLAND

[93]

(Measured Drawing on Page 95)
THE OLIVER H. ALMY HOUSE (1745), LITTLE COMPTON, RHODE ISLAND

(Photograph of Exterior on Page 80—Monograph Five)
THE WILLIAM PABODIE ("BETTY ALDEN HOUSE"), LITTLE COMPTON, R. I.


Measured & Drawn by Frank Chouteau Brown A.I.A. Boston Mass. October 6 1936.
Foot Scale for Elevation
Inch Scale for Details
4'10¼"
4'3"
2'10"
2'4½"
1'9"
MANTEL IN THE SOUTH EAST FIRST FLOOR ROOM 1745
OLIVER H. ALMY HOUSE LITTLE COMPTON RHODE ISLAND


Measured & Drawn October 6. 1936. by Frank Chouteau Brown Architect Boston Massachusetts
Foot Scale for Elevation
Inch Scale for Details
Earlist part of House built by WILLIAM & ELIZABETH (ALDEN) PABODIE (First Settlers) in 1682 with the West End added by COL. PARDON GRAY in 1762.
3'5"
5'4"
3'7½"
FIRST FLOOR MANTEL NOW IN OLDEST PORTION HOUSE OF WILLIAM PABODIE ("BETTY ALDEN HOUSE") LITTLE COMPTON R.I.

THE BROWNELL COTTAGE, LITTLE COMPTON COMMONS, RHODE ISLAND

[96]

STATUE OF
ST. VINCENT
OF SARAGOSSA
BY
JOHN
ANGEL
FOR THE
CATHEDRAL
CHURCH OF
SAINT JOHN
THE DIVINE
NEW YORK

RENDERED
WITH ELDORADO
THE MASTER
DRAWING PENCIL
By Ernest W. Watson

ELDORADO CONTEMPORARIES

In this drawing, made with Eldorado H, F, B and 2B, on Strathmore Drawing Paper No. 61, the tones were placed in such a way as to emphasize the head and hands, the rest of the figure being rendered chiefly in line. Ernest Watson says: "Rendering a superb piece of sculpture like this is comparable to playing a great musical composition on the piano. Each performance gives the artist intense pleasure if his instrument—pencil or piano—has quality of tone and is responsive to his purpose. Eldorado meets this test generously!" Pencil Sales Dept. 167-J12, JOSEPH DIXON CRUCIBLE COMPANY, Jersey City, N. J.

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FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from architects or others requiring designers, draftsmen, specification writers, or superintendents, as well as from those seeking similar positions.

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Notices submitted for publication in these Service Departments must reach us before the fifth of each month if they are to be inserted in the next issue. Address all communications to 330 West 42nd Street, New York, N. Y.

THE MART

Joseph Allan, Jr., 15 James Street, Newark, N. J., would like to obtain the April, June, August, October, and December, 1932, issues of PENCIL POINTS.

Thomas G. Reid, 307 Rutherford Street, Greenville, S. C., would like to obtain the May, 1936, issue of *American Architect*.

E. A. Maske, 40 E. Winspear Avenue, Buffalo, New York, has the following copies of PENCIL POINTS for sale: October, 1922; October, November, December, 1923; complete years 1924, 1925, 1926, 1927; January to December, 1928.

John Welker, 330 Delmar Avenue, St. Bernard, Ohio, would like to purchase bound volumes of the *White Pine Series*, in good condition. State price.

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W. Morley, 819 Dos Robles Place, Alhambra, Calif., has the following magazines for sale: PENCIL POINTS—All of 1931 except February; all of 1932, except February, April, June, and July; all of 1933; January through June, 1934. All are in good condition. *Architectural Forum*—March, June, September, December, 1925; March, September, December, 1926; March, June, December, 1927; March, June, September, December, 1928 (part one, reference numbers); January, February, March, April, 1929, in two parts. Copies through 1927 are slightly soiled, reading matter all right, the rest are in good condition. Make offer for all or part, plus postage.

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PERSONALS

MAURICE ABRAMOVITZ, *Architect*, has opened an office at 35 Newbury Street, Boston, Mass.

UPMAN & ADAMS, *Architects*, have moved their offices to Room 23, 808 17th Street, N. W., Washington, D. C.

G. ADOLPH JOHNSON, *Architect*, has moved from 16 Norwich Street to 22 Elm Street, Worcester, Mass.

JULIAN ELLSWORTH GARNSEY, *Mural Painter*, has moved his studio from Los Angeles, California, to 71 West 45th Street, New York City.

HARRY RAY NAY, *Architect*, has moved his office from Parkersburg, West Virginia, to 416 Hawley Building, Wheeling, West Virginia.

MANUFACTURERS' DATA WANTED

ROSE CONNOR, *Architect*, 170 East California Street, Pasadena, Calif. (Data on materials and equipment for residential work.)

MAURICE ABRAMOVITZ, *Architect*, 35 Newbury Street, Boston, Mass.

FRANK A. SEXTON, *Architect*, P. O. Box 683, Miami, Florida. (Data for A.I.A. file, and wishes to be placed on manufacturers' mailing lists.)

JOSEPH PFENDT, *Architect*, 2258 N. Avers Avenue, Chicago, Ill.

RONALD SENSEMAN, *Architect*, 504 Flower Avenue, Takoma Park, Md.

E. H. BLUMENTHAL, *Architect*, Route 3, Box 70, Albuquerque, N. M.

WERNER GUENTHER, *Draftsman*, 1130 Carmel, Detroit, Mich. (Data for A.I.A. file.)

ROBERT E. KAYSER, *Draftsman*, 567 Dearborn Avenue, Toledo, Ohio.

LOUIS JORDAN, JR., *Draftsman*, Box 408, Omar, West Virginia. (Data for A.I.A. file.)

G. HABERMAN, *Draftsman*, 35 West 90th Street, New York, N. Y.

WILLIAM M. PRESTON, *Draftsman*, 524 East 6th Street, New York City. (Data on materials for construction, residence work and for A.I.A. file.)

ARTHUR K. STEVENS, JR., *Student*, Kappa Alpha House, University Circle, University, Va. (Data for A.I.A. file.)

SIDNEY I. GROBSTEIN, *Builder*, 504 Monmouth Avenue, Lakewood, N. J. (Complete data for new files, including prices and estimating data.)

DIVISION OF SCHOOLHOUSE PLANNING, State Department of Education, Sacramento, Calif. (Data on general building materials and equipment, especially schools.)

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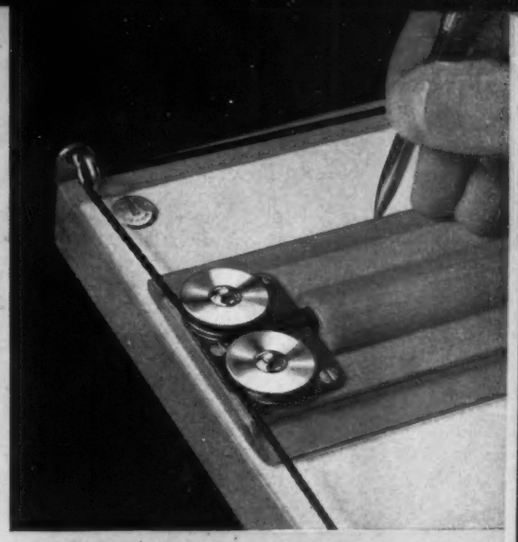

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of Interest to Architects, Draftsmen and Specification Writers

Publications mentioned here will be sent free unless otherwise noted, upon request, to readers of PENCIL POINTS *by the firm issuing them. When writing for these items please mention* PENCIL POINTS.

WINTER CONSTRUCTION WITH INCOR 24-HOUR CEMENT.—Useful reference guide for architects and engineers dealing with the subject of Incor 24-hour cement discusses the precautions that should be taken in concreting in cool, cold and sub-freezing weather, and how this type of cement reduces winter costs and makes summer schedules possible in cold weather. Tabular matter, charts, etc. 12 pp. 8½ x 11. Lone Star Cement Corporation, 342 Madison Ave., New York, N. Y.

Published by the same firm, "Cutting Costs in Concrete-Frame Construction." Brochure presenting a technical discussion of concrete frame construction. Conclusions drawn from an analysis of a wide range of concrete-frame erection schedules are also presented together with concreting suggestions. 12 pp. 8½ x 11.

CARRIER AIR CONDITIONING, REFRIGERATION, SPACE HEATING.—A.I.A. File No. 30-F-1. New catalog covering a complete line of air conditioning, refrigeration and space heating equipment for industry, business and the home. Capacities, ratings and diagrams are included to indicate the wide variety of units and central plants that are available. 16 pp. 8½ x 11. Carrier Corporation, 850 Frelinghuysen Ave., Newark, N. J.

Published by the same firm, "Carrier Air-Conditioned Refrigeration." Brochure dealing with the subject of air-conditioned refrigeration presents a complete line of compressors, cold diffusers and evaporative condensers. Auxiliary equipments for special applications are also shown. 20 pp. 8½ x 11.

PORCELAIN PLYMETL AND KINDRED PRODUCTS.—Bulletin describing Porcelain Plymetl and Steelwood and their applications in building construction. 8 pp. Haskelite Mfg. Corp., 208 W. Washington St., Chicago, Ill.

KINNEAR ALL-STEEL ROL-TOP DOOR.—A.I.A. File No. 17-A-2. Bulletin No. 11, just issued, illustrates and describes in detail a new type of all-steel garage door. 8 pp. 8½ x 11. The Kinnear Mfg. Co., 3000 Fields Ave., Columbus, Ohio.

METAL LATH NEWS.—A.I.A. File No. 20-B-1. Issue No. 3 contains a number of interesting articles describing various types of exterior and interior metal lath constructions. 8 pp. 8½ x 11. Metal Lath Mfrs. Assn., 208 South La Salle St., Chicago, Ill.

COMFORT THAT PAYS FOR ITSELF.—New brochure discussing the necessity for home insulation. It describes rock wool home insulation and shows why this fireproof material acts as an effective fire-stop when blown into the normally hollow outside walls and into accessible attic spaces of a home. The blowing process is described in detail. 22 pp. 8½ x 11. Johns-Manville, 22 E. 40th St., New York, N. Y.

I G A SYSTEM OF INSULATED GLASS AREAS.—Bulletin giving descriptive and specification data covering a system of insulating windows, and other glass areas, to eliminate frost, ice, and attendant problems due to excessive condensation of moisture. Set of six detail plates showing different types of window construction accompanying bulletin. 8½ x 11. Reese Metal Weatherstrip Co., Minneapolis, Minn.

THE STORY OF C-X TEXBOARD.—Folder announcing and describing a new product of genuine cabinet wood veneer applied to a Celotex base suitable for homes, offices, taverns, hotel lobbies, churches, restaurants and apartments. Specifications and detail drawings. 4 pp. 8½ x 11. The Celotex Corporation, 919 North Michigan Ave., Chicago, Ill.

KITCHEN CABINETRY BY KITCHEN MAID.—A.I.A. File No. 35-C-12. Brochure illustrated in full colors showing a wide range of cabinet equipment for kitchens and pantries. Set of separate detail sheets are included. 12 pp. 8½ x 11. The Kitchen Maid Corporation, Anderson, Ind.

THE CHARM OF A WELL-LIGHTED HOME.—Attractive brochure illustrating various types of lighting fixtures designed especially to give correct lighting to all of the different activities in each room of the home. 22 pp. 8½ x 11. Lightolier Co., Jersey City, N. J.

PAINTING FOR LIGHT AND DECORATION.—A.I.A. File No. 25-b-22. Useful reference manual dealing with the subject of Luminall, a paste casein paint suitable for interior work in homes, shops, stores, hotels, hospitals, offices, schools, public and industrial buildings. 24 pp. 8½ x 11. National Chemical & Mfg. Co., 3617 South Wall St., Chicago, Ill.

GRID UNIT HEATER.—Folder giving detailed description of a type of unit heater equipped with heating sections made of special aluminum alloy cast metal to metal bond with the steam chambers which are cast high test iron. 4 pp. 8½ x 11. The Unit Heater & Cooler Co., Wausau, Wis.

SIGNAL AUTOMATIC WALL BOX KITCHEN VENT FAN.—Descriptive folder covering a built-in type of automatic wall box kitchen ventilator, also ring and adjustable type vent fans and a bucket blade ventilator fan for use in commercial kitchens, laundries, bakeries, garages, etc. Dimension tables and drawings. 4 pp. 8½ x 11. Signal Electric Mfg. Co., Menominee, Mich.

BRYANT IMPROVED DUPLEX RECEPTACLE.—A.I.A. File No. 31-C-71. Folder announcing and describing the important features of improved Bryant duplex receptacles Nos. 4832, 4832-X and 4832-Y. 4 pp. 8½ x 11. The Bryant Electric Co., Bridgeport, Conn.

Published by the same firm, "Bryant Type C Flush Tumbler Switches." Bulletin describing the application and utility of a line of flush tumbler switches, which control type C filament lamp loads. 4 pp.

JANITROL WINTER AIR CONDITIONING.—Bulletin giving complete description of the construction design and operation of the Janitrol conditioner which, in conjunction with the Janitrol distribution system, provides winter air conditioning. 8 pp. 8½ x 11. Surface Combustion Corp., Toledo, Ohio.

Published by the same firm, "Janitrol Model C A Conditioner." Bulletin explaining the construction features and operation of the model C A conditioner. 6 pp. 8½ x 11. "Janitrol Gravity Heaters." Descriptive folder covering a new line of Janitrol gravity heaters. Complete design and operation data is included. 6 pp. 8½ x 11.

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POSITION WANTED: Competent designer-draftsman wishes to associate himself with high class architectural firm. Box No. 1212.

POSITION WANTED: Capable and efficient architectural draftsman. Has had 30 years' experience and familiar with all types of construction, alteration work and plumbing. Have supervised a number of projects and was chief draftsman. Box No. 1208.

POSITION WANTED: Architect experienced in the construction and business sides of the profession, but who is not a designer, desires to relocate in the south, and would like to open negotiations with either an established firm or a younger designer looking toward an association. Experience covers 25 years in own practice prior to depression and now employed in architectural work. Member A.I.A. Box No. 1209.

POSITION WANTED: Architectural draftsman, age 30, seven years actual experience, completed 4 years architectural course at Armour Institute of Technology, two and a half years with Federal Government. Capable of handling other office duties. Salary commensurate with position. Box No. 1210.

POSITION WANTED: Young lady, 11 years' unusual experience with architects, general and sub-contractors, real estate, knowledge of mortgages and insurance, can read blue prints and assist estimator, desires responsible position as secretary, bookkeeper-stenographer. Familiar with financial and tax reports and can furnish excellent references. Box No. 1211.

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POSITION WANTED: Young man, 22, graduate of Cooper Union architectural construction and design. Experience in drafting office, water colorist, show card and letterer, etc. Simon Ross, 176 Pennsylvania Avenue, Brooklyn, N. Y.

POSITION WANTED: Registered architect wants position with reputable architectural firm. Married, 29 years of age, B.S. degree in architectural engineering, Iowa State College. Eight years' experience in building construction and own architectural practice. Have government position at present. Any location. W. E. Bedke, 711 Fifth St., Valley Junction, Iowa.

POSITION WANTED: Extremely agreeable young architect, 26 years of age, with two degrees from well known universities and several years of well rounded experience, wishes to connect with a small architectural firm doing high grade work, with the possibility of a partnership in the future. Essentially a designer, experience has included much drafting and rendering. Box No. 1216.

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POSITION WANTED: Registered architect, 32 years of age, trained at Columbia and one year abroad. Associated with best architects in the city. Designer—general drafting — experience covers monumental, country residence, commercial buildings, apartments, public work, churches, etc. Box No. 1218.

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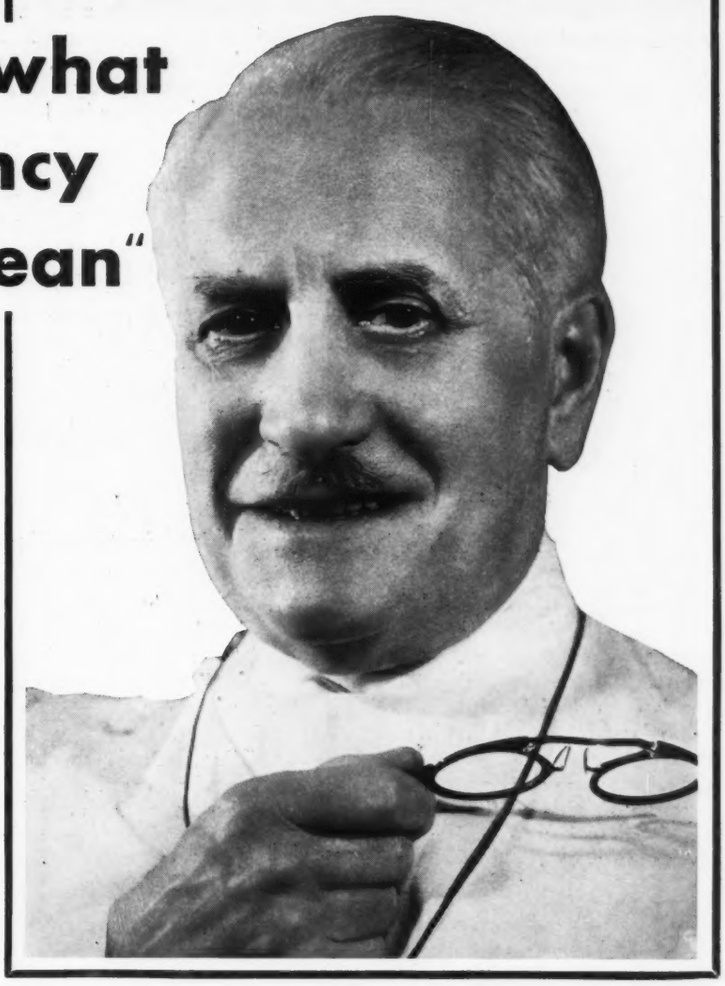

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Refer to Sweet's Catalog, Section 27 — Page 11

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(Continued from page 698)

ing the cooler parts and causing minute condensation and in turn offering a better chance for dust and dirt to collect on the moistened surface.

"You will have observed, no doubt, that where steel beams are used as the roof framing members in a building, that the part between the framing members is lighter than the part immediately attached to the framing. Steel offering less resistance to the conductance of cold from the exterior, the parts immediately under it are naturally colder than the part where there is an air space immediately over top, and the part under the beams becomes a darker shade due to the collection of dirt. If the beams are of wood then the heavy wood members have a higher insulating value than the air space and consequently the parts between the framing in wood construction will be darker than that immediately under the wood framing.

"You will observe the same phenomena in wood lath and plaster construction where the ceiling joists and the lath show lighter streaks on the ceiling and the plaster shows darker. I have the same phenomena indicated on the ceiling of my drafting room which is insulated with 1½" cork, nailed to wood ceiling joists and then plastered. You cannot see the lines of the wood joists, but you can pick out on the ceiling practically every nail that was driven through the cork. The ceiling of this drafting room, being exposed to the comparatively cold attic space, is fairly well insulated by the cork, but where the nails were driven through the cork and not countersunk, dark spots have occurred on the finished plaster ceiling below."

Surely these all seem sound ideas, and should prove useful to us. Perhaps next month I can find room for some brief quotations of like interest. In the meanwhile, thanks to you letter writers one and all for your cooperation, and please forgive me if I don't find time to answer each of you with the personal reply you deserve.

Housing Models Exhibited in New York

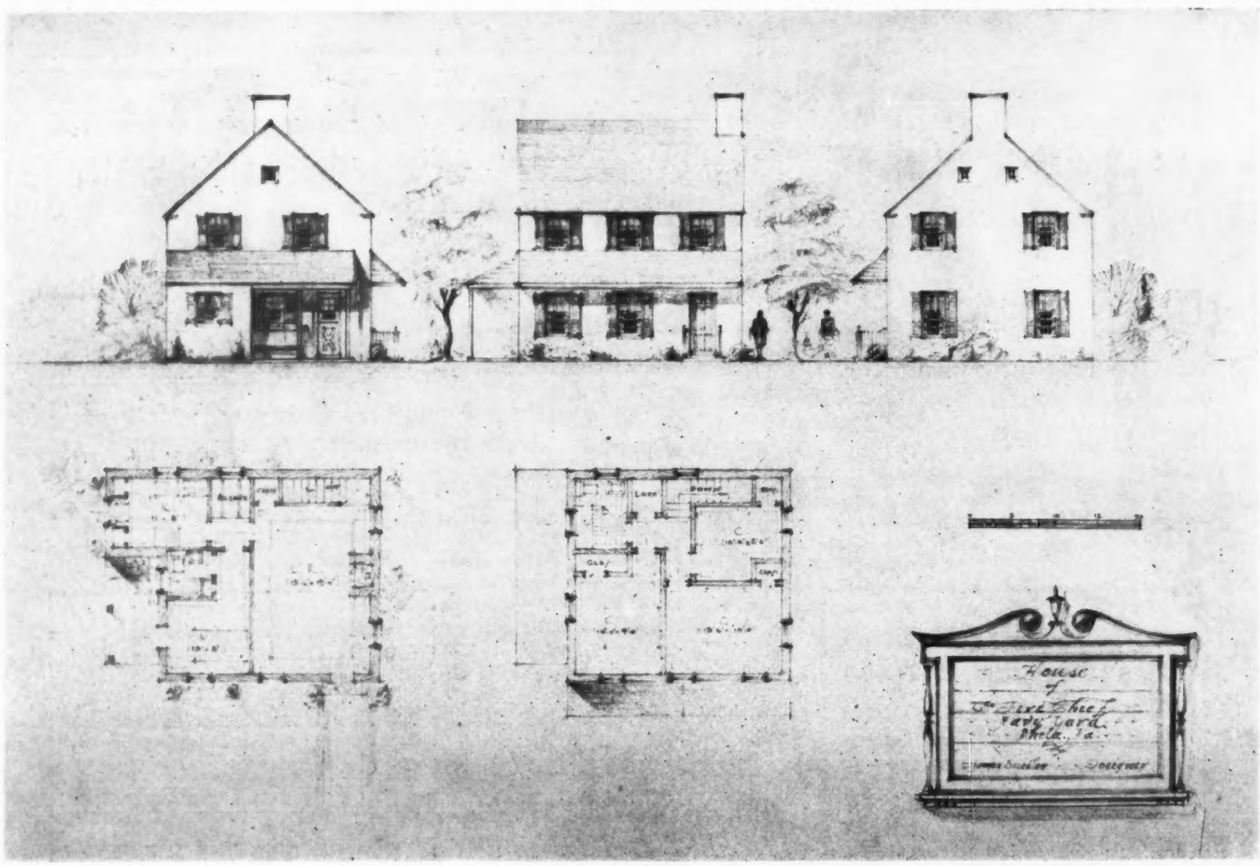
"Real Estate Follies" is the name given to one of the sections of the exhibit of housing models, prepared by the WPA under the direction of the New York City Housing Authority, which opened at the New York Museum of Science and Industry in the RCA Building, Rockefeller Center, on Wednesday, October 21. The models, on view for their first public showing, will be at the Museum through December 31.

Models in this particular group show, in exact proportion, actual city blocks of old and new law tenements, new multiple dwellings, New York's finest private dwellings, and a typical block of one and two family houses. Each one illustrates the way in which New York City's land has been covered without regard to proper light and ventilation. Besides these models of actual blocks are two additional models showing the terrific coverage both in area and type which is still permitted under our present laws.

The exhibit includes 61 models built to a uniform scale of 1 to 364, or 1/32 of an inch to one foot. There are also 17 large photographs showing past and present conditions and of housing projects now under way. Other models show all of the so-called model housing projects from the early model tenements to Hillside Homes, Boulevard Gardens and First Houses which have been built in New York City.

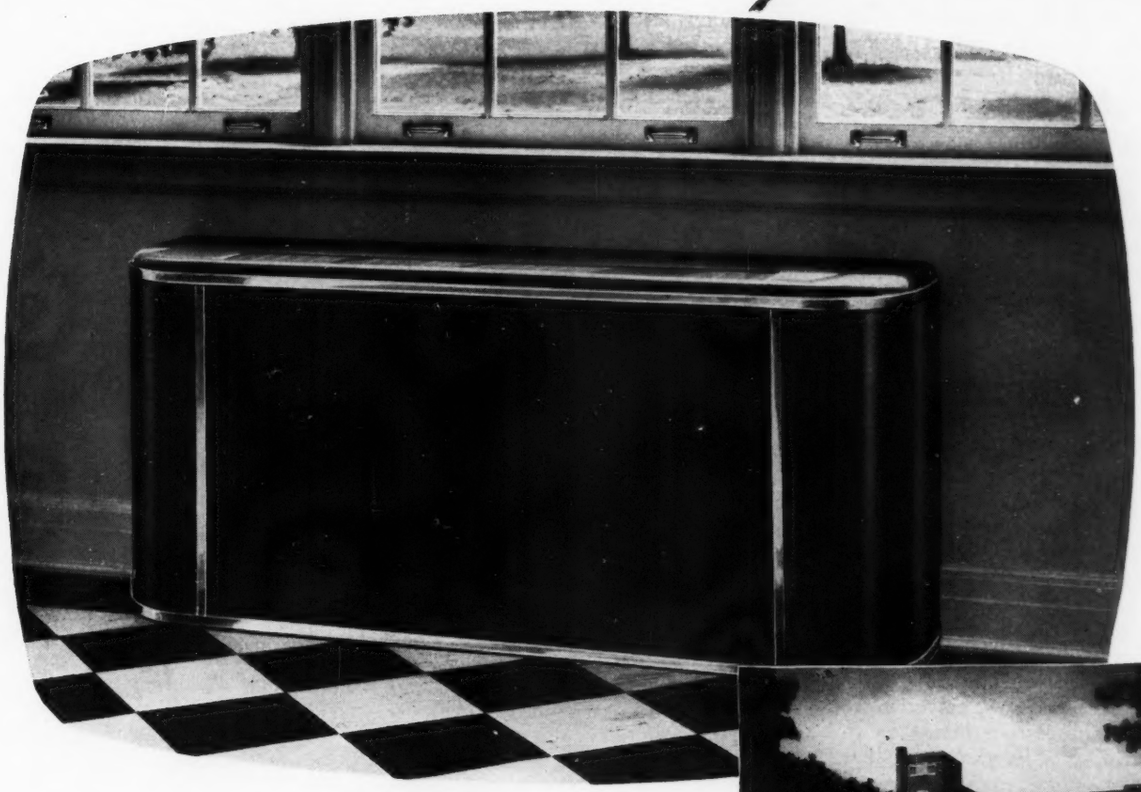
There are ten models of housing projects now under construction of the Federal Emergency Administration of the Public Works in other cities and a number of models of the Williamsburg and Harlem River projects now under construction in New York by the Public Works Administration

(Continued on page 34)



THE HOUSE OF THE FIRE CHIEF AT THE PHILADELPHIA NAVY YARD AS DESIGNED AND DRAWN BY C. JONES BUEHLER

For Schools Everywhere!



Manhasset High School, Manhasset, Long Island, N.Y.

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The striking modern cabinet of furniture steel is trimmed with stainless steel. It is backed by a soundly engineered unit...every part except controls made by Sturtevant, assuring perfect coordination of parts and unit responsibility.

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A catalog for architects . . . designed in cooperation with an architect . . . containing the kind of data and drawings which architects need.

(Continued from page 32)

in cooperation with the New York City Housing Authority.

Finally, there is a group of models showing the projects proposed by the New York City Housing Authority for the Red Hook section in Brooklyn and the Halletts Cove and Queensbridge areas in the Borough of Queens.

A special model shows the relative density of population in various sections throughout New York City by means of small rods whose height above the map is in direct proportion to the population per acre of the areas where they are located. Taken as a whole, the models present a picture of multi-family housing in New York City as it has been, as it is and as it should be if it is to conform to modern standards of light, ventilation and population density.

Commenting on this exhibit, Commissioner Langdon W. Post, Chairman of the New York City Housing Authority, said: "New York City has grown up almost entirely without plan, without restriction. This exhibit shows the results as they affect the places where our people live. There may be a possible justification for our towering office buildings which make canyons of our streets downtown and in some of the mid-town sections. There is no possible justification for building apartments or homes on the same principle of crowding the land both by covering most of it with buildings and by pushing the buildings up into the air. We have almost forgotten that proper dwellings should have spacious yards and parks with fresh air, sunshine and play space for children and some room to turn around for adults.

"Actually, we have plenty of space in New York City for such properly designed homes. The models of the area to be covered by the Williamsburg Housing project as it used to be and as it will be, show the effects of good planning. The buildings which have been demolished were thoroughly bad housing, covering seventy to ninety per cent. of the lots on which they were built. The new buildings will cover less than thirty-five per cent.; every room will have a window to the outer air and cross-ventilation; and yet by proper designing we shall accommodate almost as many families as the number which moved out to make way for the project.

"In some sections of the city, such as the lower east side and Harlem, the population density should be reduced, but in other sections it may be considerably increased without any sacrifice to light or open space. The models in this exhibit offer the people of New York an opportunity to see graphically portrayed the deplorable way their city has been exploited by 'Real Estate Follies'—a show which has had a run of one hundred years—and on the other hand, what their city could be like if it were properly planned."

Travel Note

W. Ralph Merrill of Dallas, Texas, who worked on the Texas Centennial Exposition and made many of the studies and renderings of the show buildings, has recently returned from a European trip with a bunch of fine sketches, some of which will appear soon in PENCIL POINTS. He writes: "In spite of the rather wet summer, in Europe, we had a very enjoyable trip. Went over and back this time on the 8000-ton freight ships of the Black Diamond Line and wouldn't choose to go any other way from now on. Mrs. Merrill and I bought our bicycles in Antwerp at the Vogel Markt for $11 each and after riding them all over Belgium, England, and Scotland we sold them near London for $6.50 each. Right cheap transportation, I would say. Our sketching material was carried conveniently in briefcases strapped on behind."

Architect's Daughter Exhibits Frescoes

Virginia H. Wood, daughter of Waddy B. Wood, F.A.I.A., of Washington, is exhibiting Frescoes and Sketches for Murals at the Paul Reinhardt Galleries in New York, December 1 to 19.

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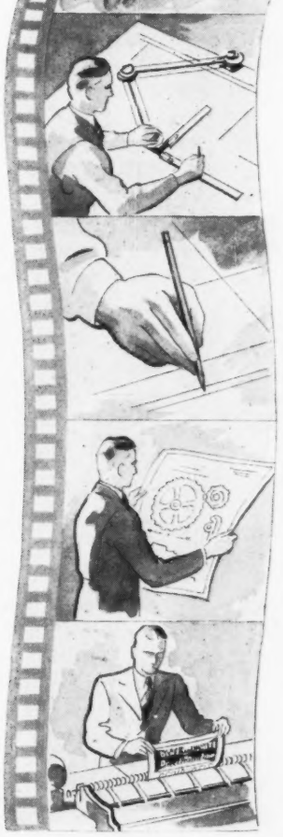

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A Letter from the F.A.E.C.&T.

To the Editor,
Dear Sir:

"In a report in your November issue, Mr. John F. St. George raises several issues, which I should like to discuss. He says that, 'There is no evidence that our (Guild) members want or would benefit from a joint organization with other groups of varied and unrelated classification.'

"Mr. St. George undoubtedly refers to the proposal made by the F.A.E.C.&T. —that the Architectural Guild join the Federation, and that an autonomous section of the architectural men be set-up within the Federation to deal with the special problems pertaining to them. Evidently, he sees no advantage for the architectural employees in being organizationally knit with engineers and other allied professionals. We know that the architects in the F.A.E.C.&T., who number twenty times as many as the Guild, have found it extremely advantageous to be in one organization with engineers, structural designers, etc. Of course, we recognize that the architects have certain special problems. However, we are also aware of the many common problems that face all technical men. Our experience is that these common problems can best be solved by the closest collaboration of all concerned. For that reason the F.A.E.C.&T. proposes a central body of representatives from each professional group. Such a body would be the best medium for cooperation towards our common good.

"In the past two years the F.A.E.C.&T. and the Architectural Guild of America have worked closely in numerous campaigns. In the activities enumerated by Mr. St. George in his report, the Federation not only participated but played an active and important role (although he makes no mention of this). Both organizations made progress precisely because of these joint activities. However, we feel that our work would have been much more effective and our successes greater had we been part of the same organization.

"In regard to the A. F. of L.—the Federation has reached an agreement for affiliation with the A. F. of L. and invited the Guild to join with them in this affiliation. The aforementioned report raises the question of desirability for such affiliation. It expresses the belief of some members that such affiliation would hurt the growth and prestige of the Guild.

"According to them, the influence of the Architects would be small since they would only 'form a small part of the division of the labor group to which they would be assigned.'

"Firstly, while the present joint membership of the Guild and the Federation is still small compared to the thousands of technical men unorganized, we feel that we *could* play an important role to the advantage of our professional men by being a part of the labor movement. We can point to the Newspaper Guild, American Federation of Musicians, American Federation of Teachers, etc., as organizations which have benefited greatly through their A. F. of L. affiliation.

"Secondly, our affiliation will be a stimulant for further organization among technical men. Hundreds of men have recently joined the F.A.E.C.&T. primarily because of our proposed affiliation.

"There is no question that, in addition to the above, the greatest benefits will accrue through our membership with the powerful Building Trades Councils and Central Labor Bodies."

Very truly yours,

Jules Korchien
National Secretary,
F.A.E.C.&T.

Mr. Hobbie Knows About Horses

A letter to the editor from E. H. Hobbie of the Mississippi Glass Company reads as follows:

"After looking through the November issue of Pencil Points, I cannot resist referring to the mural at the top of page 628. I wonder what our western friends will say. In my opinion, it might be excusable to build a corral of finished lumber with square cut ends nailed to turned posts, but no horseman—and there are many of them around Colorado Springs—would ever excuse anyone for illustrating a rider, especially one portrayed as a cowboy, mounting a horse from the "off" (right hand) side. It just is not done and is evidence of a novice, tenderfoot, greenhorn, or what you see fit to call him."

But Mr. Mechau Knows Better

The artist, Frank Mechau, whose work Mr. Hobbie criticises above, responds as follows:

"Mr. Hobbie, I fear, has stuck his neck out, as have a couple of other none too profound historians of the Pony Express era. How does it happen that Mr. Hobbie, with his news-reel approach to art, failed to notice that one of the riders carries his carbine in his left hand and the other rider has zippers on his pants. My reasons for arranging the composition as it is are 90% structural. It simply reads better this way than it would if I had put the pony rider on the left side of the hoss. However, most of my formal liberties are pretty well covered by history, which is fairly elastic on the subject. Mr. Hobbie, if he is interested, may soon read some believe-it-or-not facts about the early days in a book to be called 'Brave Little Men,' being written by my brother and illustrated by myself.

"The cut Pencil Points prints is of the sketch for the Colorado Springs mural, and suffers somewhat from too crisp a use of line. The poles were not intended as turned lumber, but as lodge pole pines, which might fool almost anybody. There were at least three sawmills functioning along the Pony Express route before 1860. The corral was intended as part of a 'station.' These stations were scattered along at an average of every 15 miles; the pony rider's day's work being approximately 75 miles.

"The well-paid riders were not hulking, tough, left- and right-handed gun slingers, but generally small and light young men, frequently given to dandyism, as are many of our modern cowboys when they're in the dough. To conclude, the rider on the 'off' side of the hoss is legitimately there. The early horseman learned his riding technique from the Indian and could mount or dismount from either side. Wouldn't it be rather ridiculous if a consummately skilled rider had to scamper around to get on or off a hoss in an effort to avoid some Indian's potshots? Training western horses to mount only from the left dates from the time horses became cow horses and the business of roping was done off the right side. And so, Mr. Hobbie, you have unwittingly maligned a westerner born and bred with a horse in one hand and a brush in the other. Quite obviously your hobby is neither horse history nor art."

Sincerely,

Frank Mechau
Redstone, Colorado
Nov. 24, 1936

Advertiser Errs and is Sorry

The Armstrong Cork Company asks the editors to convey to our readers their regret that, in error, the name of Eugene Schoen & Sons was omitted as designer of the Hotel Ambassador dining-room shown in the Armstrong Cork Products Company advertisement in our September issue.

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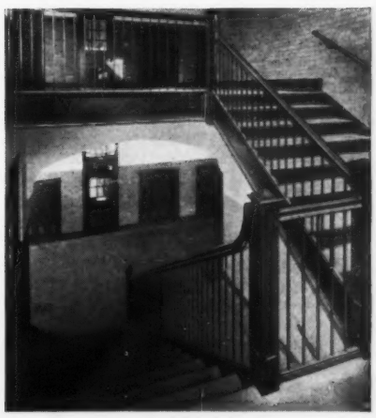

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"'You acted so strange tonight,' the Mistress leered. 'You crawled in your shell and sulked all evening.'

"The Master broke down and sobbed his bitter secret. 'I've got Scratchitus. I'm a wreck. I suffered from it all day.'

'Well, you poor dumbbell,' the Mistress hissed, 'don't you know what to do for Scratchitus (gritty pencils)?'

'No,' gulped the Master. 'Father never told me.'

'Tomorrow throw away those gritty pencils you use and buy Venus Pencils,' the Mistress wheedled. 'They'll free you from your terrible inferiority complex. Every he-man uses Venus Pencils.'

"Well, it was the only way out for the Master. Next day he began using Venus Pencils.

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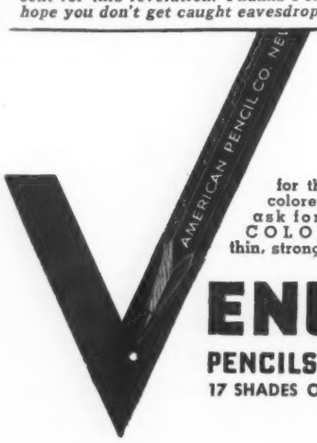

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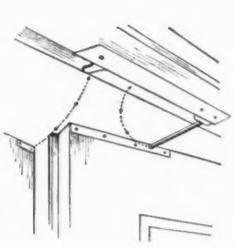

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PREVIEW

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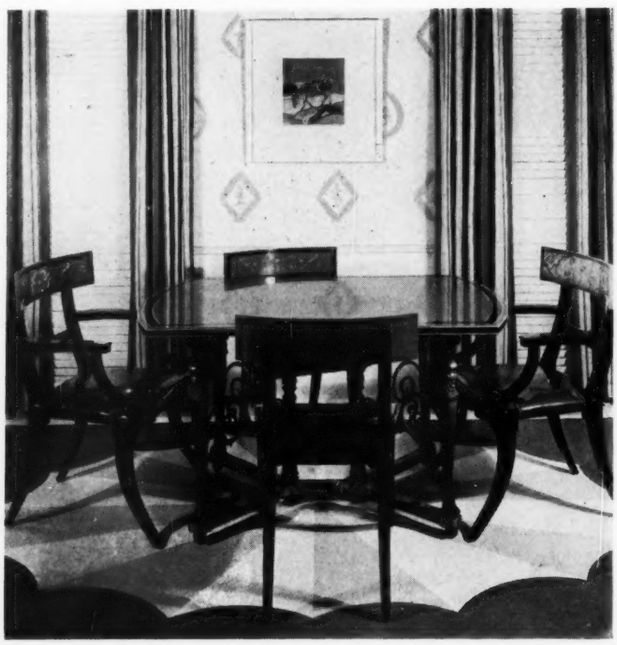

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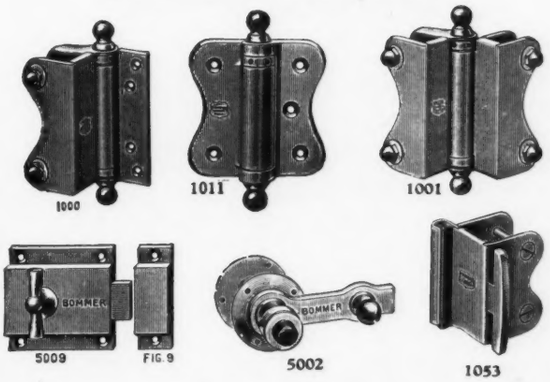

Send for Catalog No. 55B

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At Williamsburg, Virginia, many of the rooms in the Governor's Palace, the Raleigh Tavern, St. George Tucker House, and other buildings in the Restoration, are painted in "beautiful colors lost to general knowledge for more than a century. Some of them are: mulberry, raspberry, unusual greens and blue greens, red browns and warm beiges. Decorators are prescribing them to be used as fitting and authentic backgrounds for early American furniture."

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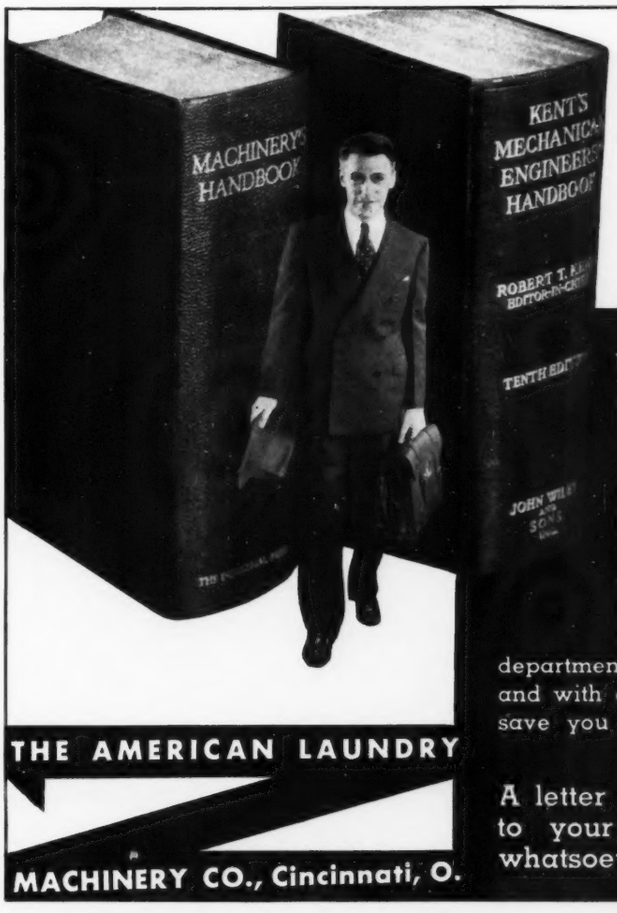

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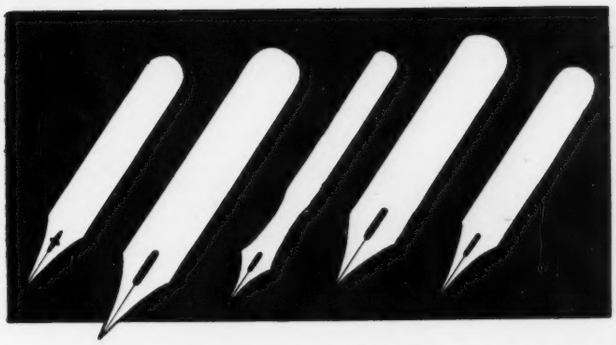

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Write to Pencil Points for descriptive circular "H"

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P.S. Several requests have come for autographed copies for XMAS. I'll gladly autograph any of my books on request, and have P.P. wrap them as Christmas packages.

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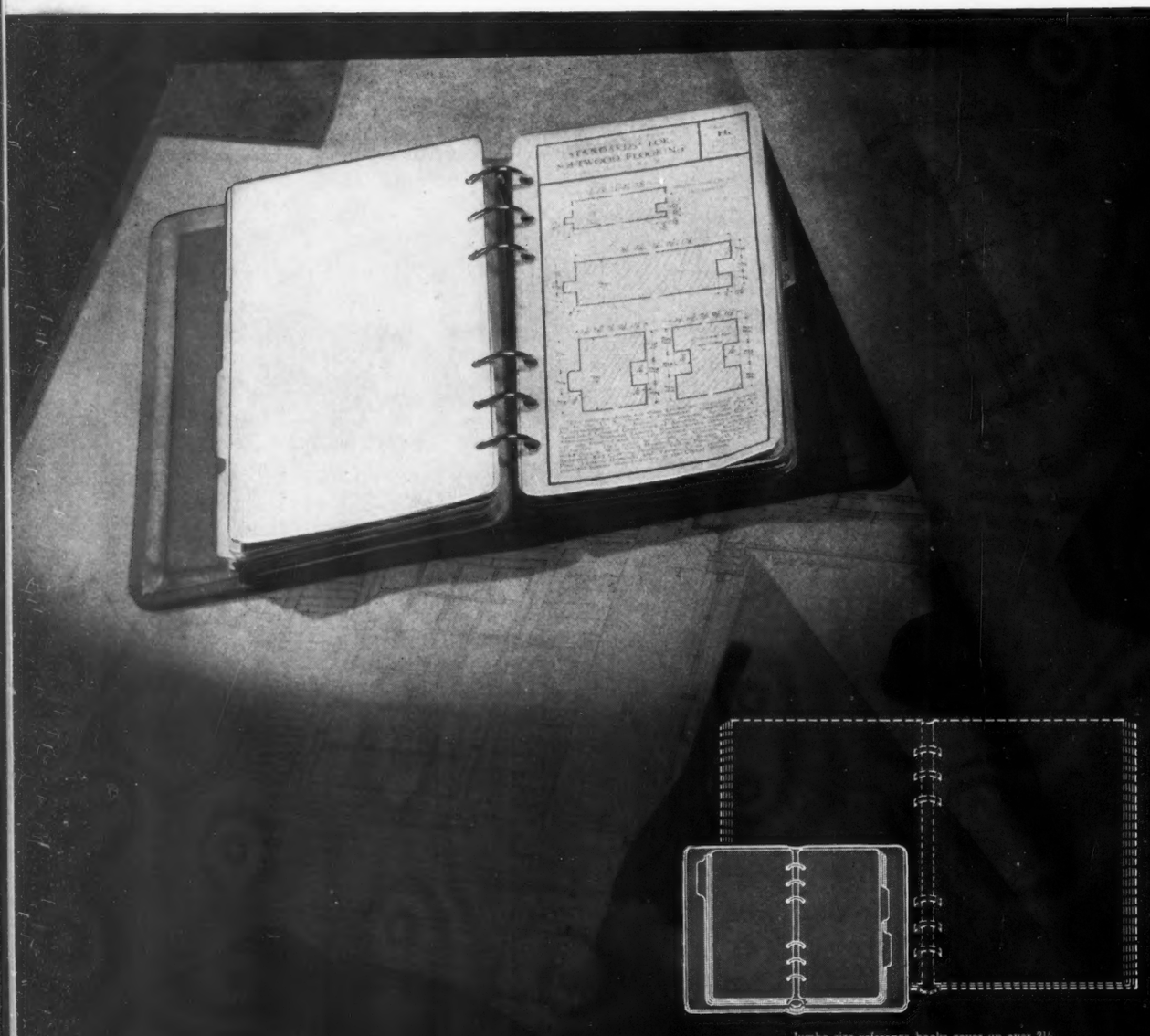

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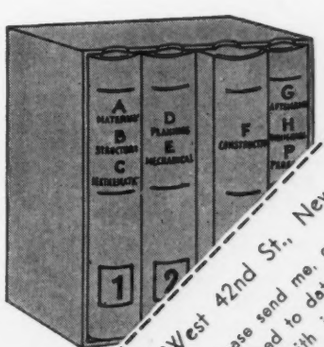

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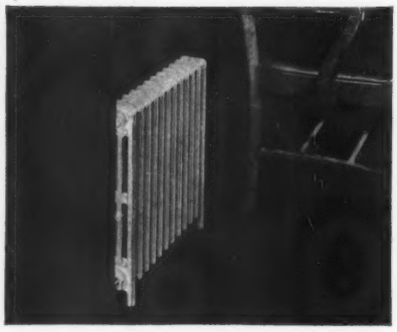
NEW PRODUCTS
Changes in Personnel, etc.

NATIONAL ART RADIATION

A new, small tube-type radiator has been added to its line by the National Radiator Corp., Johnstown, Pa. The new radiator, which is known as the National Art line of radiation, is claimed to be truly artistic in design. The radiator is not an adaptation from other types of radiation, but represents entirely new styling. The designer has utilized vertical lines and set-back planes, which is so popular in modern furnishings and fixtures.

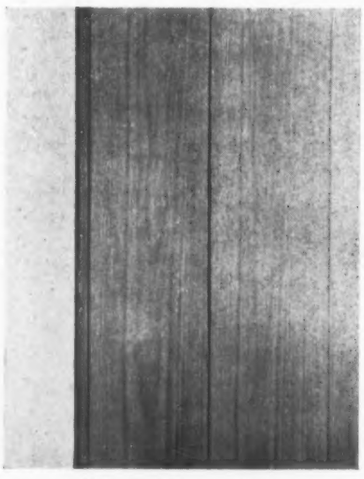


The new type of radiation can be used either exposed, or recessed, and is particularly desirable for modernization work. It is also pointed out that only minor piping changes are required in order to replace older types of radiation with the National Art line. The units are made in three widths: 3, 4 and 5 tube, and in heights ranging from 19 in. to 26 in. The radiators are of cast iron construction and are assembled in any length in multiples of 1½ in. The radiator is of push nipple construction, and can be furnished legless.

C-X TEXBORD

The Celotex Corporation, Chicago, announces the introduction of a new product, C-X Texbord, a veneer paneling which gives the appearance of solid wood grooved in plank formation.

C-X Texbord is made by applying genuine fine cabinet wood veneers of walnut, mahogany and avodire to a Celotex base. Each unit is an individual plank with a grain and figure different from that of every other. It is produced in planks 6 and 9 in. wide; 8 and 10 ft. long; and ¼ in. thick. The Texbord planks have beveled edge shiplapped joints. The usual necessity for batten strips is entirely eliminated.



By alternating the 6 and 9 in. widths an attractive random width paneling effect is accomplished. All attachment to the wall is made under the shiplap joint so that no nail heads are apparent and there are no nail holes to be plugged by finishers.

C-X Texbord can be installed without removing baseboards, mouldings or window casings. The planks are flexible enough to conform to the wall surfaces and permit bending around archways and moderate curves.

It is easy to plan and figure C-X Texbord because it is manufactured in standard widths, available out of stock. There is no waiting for special panels to be manufactured. The 8 and 10 ft. lengths can be installed by any contractor—eliminating complicated and costly layouts.

C-X Texbord is suitable for homes, offices, taverns, hotel lobbies, churches, restaurants and apartments.

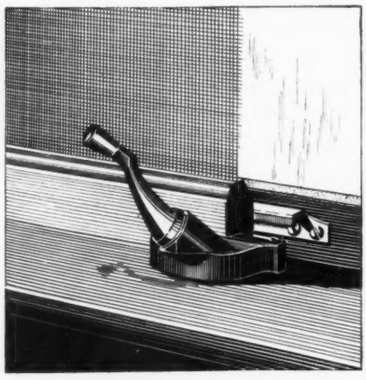
ROLLER GUIDE SHOES FOR ELEVATORS

Otis Elevator Co., New York, announces that it has perfected an entirely new type of elevator guide shoe. Experimentation which has gone on for a long time has finally culminated in a type which produces an action somewhat similar to the "knee action" of an automobile. This shoe consists of rubber-tired wheels, supported by a spring action, which roll silently on the elevator guides and has many advantages, including quietness and smoothness of operation and greater economy in the operation of the elevator. With this new type no lubrication of the guides is necessary, such as is required with the ordinary type of shoe in use at the present time.

Tests have shown that considerable power savings may be expected through the use of this improvement because of the fact that there is so little friction.

NEW WIN-DOR ANGLE DRIVE OPERATOR FOR WOOD CASEMENT WINDOWS

A newly designed angle drive operator for wood casement windows has just been placed on the market by the Casement Hardware Co., 406 North Wood St., Chicago. It works through the screen. The illustration shows the screen cut away in order to see the operator channel which is fastened to the casement. The inside screen is simply notched at the place where the operator fits half way into it. The distance required between the screen and the window is 1½ in.



This new operator is said to be of decidedly popular design and is especially convenient for opening, closing and automatically locking wood casement windows where wide inside stools are used. It is also made adaptable for attaching to marble, tile and concrete window sills. The operator is reversible, fits any sash, 15 in. wide or wider and is being widely used on every type of modern wood outswung casement window.

NEW PRESERVATIVE FOR EXTERIOR MILLWORK

The Western Pine Association, Portland, Ore., announces a new and effective type of preservative, known as Permatol, for sash, doors, frames and other exterior millwork. The outstanding properties of Permatol are its high toxic values, oil-soluble qualities and its high degree of permanence after injection into wood. Furthermore, it is inexpensive, easy to handle and simple to apply on all woods commonly used for millwork. Permatol does not affect the color, finish, size, shape or paintability of the wood. The treating can be done on completely assembled products.

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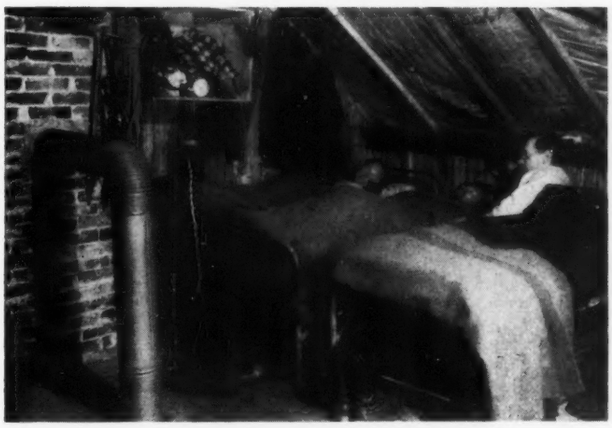
(at the top of Mount Washington)

...*but it's* WARM *inside*

(note Cabot's Quilt insulation)



The Mount Washington observatory has perhaps the coldest and most exposed location of any winter residence in the United States. It is kept warm for the young men who occupy it all winter by a stove in the living room, a chimney pipe extension into the bunk room (pictured above)—plus the insulating power of Cabot's QUILT.

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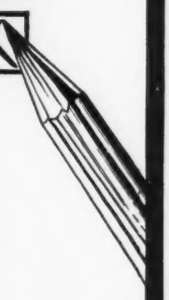

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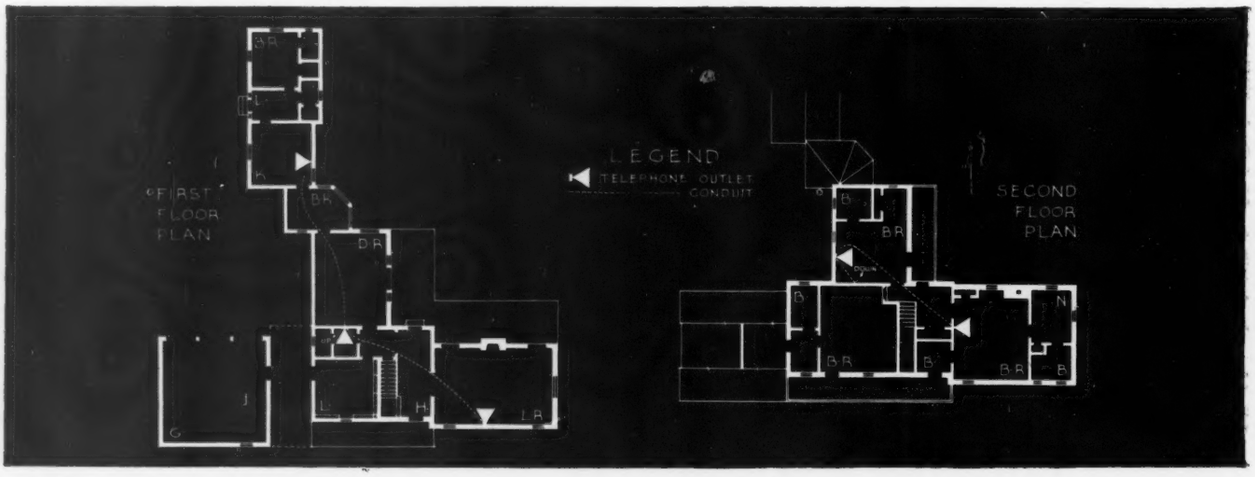

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